Condition of Education
In Connecticut

Elementary and Secondary

Meeting *The Challenge*

1985

State of Connecticut

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Foreword

Each year, a review of the data from Connecticut's public schools leaves Connecticut educators proud and reflective. In the annual report on the condition of education in the state, what has happened is spread out before us. The positive results of efforts to improve opportunities for students are there for all to see. So are the weaknesses, areas needing improvement and change in order to achieve the equity and excellence for which we are all striving. *Meeting the Challenge* provides both a report card on the past year's achievements and an opportunity to look ahead to where we can go if we move forward on the course we have plotted.

Admittedly, *Meeting the Challenge* contains a lot of statistics. Only by describing all aspects of the state's educational enterprise can we accurately portray the condition of education in Connecticut schools and fulfill the legislative mandates to report on the numerous aspects of the State Board of Education's responsibility, the State Department of Education's work, and the status of education in our public schools.

This annual report for the period July 1, 1984 through June 30, 1985 represents a transition. This was the year in which a new comprehensive plan, *Design for Excellence*, was developed, merging the plans for elementary, secondary, vocational, career and adult education into one unified approach and one document. As part of the planning process, we identified for each of the Board of Education goals the indicators of success by which we will measure progress in achieving the goals and objectives of the board and the department. Many of the indicators rely on data that are familiar, such as the information presented in the tables and graphs in *Meeting the Challenge*. A number of the indicators are new, designed to measure activities and programs for which we are beginning to collect data, such as 4th, 6th and 8th grade mastery testing, for which performance records and trends are just being established.

The next annual report, for 1985-1986, will be tied closely to the indicators of success found in the new five-year comprehensive plan. In the present report for 1984-1985, data relating to one of the designated indicators of success are identified by a small symbol: ▬. As implementation of the comprehensive five-year plan accelerates, you will find us reporting on more of the indicators of success to give a clearer picture of the condition of education and what our future goals should be.

Education in Connecticut is a joint venture, a state and local partnership. Cooperation is the key to our ultimate successes. Next year let the record show that Connecticut has moved closer to equity and excellence in education for all its citizens.

Gerald N. Tirozzi
Commissioner of Education

Connecticut: Its People And Its Schools

Connecticut's public schools exist to serve all the state's citizens equitably. The schools cannot be selective about whom they will serve or what needs and challenges they will try to meet. Their goals and objectives are determined by the social and economic needs of the people they must serve. As the character of the population changes and new needs develop—and this is happening rapidly in this decade—schools and teachers must adapt.

Socioeconomic and educational trends in Connecticut, for the most part, parallel what is happening nationally. When a front-page headline in *The New York Times* reads, "Millions Bypassed as Economy Soars" and the Connecticut section of the same paper has a feature on the "Growing Problem of Homeless Families," Connecticut educators know that they cannot remain aloof from today's realities.

To set the scene and provide some insight into the trends and issues that will challenge the state's elementary and secondary schools during the balance of the '80s, this annual report for 1984-1985 begins with a profile of Connecticut's people, its schools and its teachers.

Connecticut's People

Connecticut is a small, heavily populated state. Since the 1980 census, the population, according to the Department of Health Services, has increased approximately one-half of one percent per year, to an estimated total of 3,198,230 people in 1985.

Most of Connecticut's people—2.8 million of them—reside in towns of 10,000 or more. Nearly 20 percent reside in the five major cities: Bridgeport, Hartford, New Haven, Stamford and Waterbury. Fewer than 400,000 live in the 87 towns under 10,000.

The previous decade, 1970-1980, was a period of slow growth. Connecticut showed a modest net increase in population, gaining 75,000 or 2.5 percent between 1970 and 1980, while the nation gained 11 percent. The state's lag in population growth is attributed to an unusually low birth rate, the movement of retirees to the south and southwest, and the outmigration of displaced workers during periods of recession.

The state's Office of Policy and Management (OPM) anticipates a different picture for the eighties. OPM projects a 4.8 percent increase over the ten-year span, with the population rising to 3,258,000 by 1990. The projection is premised on a turnaround in worker migration patterns, a continued increase in life expectancy, and a slight increase in births.

Connecticut's birth rate is one of the lowest in the nation. In 1980 the number of births per 1000 population was 12.4 compared to 16.2 nationally. While Connecticut's birth rate rose to 13.1 per 1000 in 1983, one in every ten babies was born to a teenage mother.

The three largest counties in the state are Fairfield, Hartford and New Haven. Since 1980, however, the other five counties—Litchfield, Middlesex, New London, Tolland and Windham—have been the fastest growing, all with more than a two percent growth rate.

The proportion of nonwhite children under five is greater in 1984 than 1970. The population aged 16 and over increased 27,000 between 1983 and 1984 with the heaviest increase—19,000—among males. White persons 16 and over decreased by 16,000 but the black working-age population increased 22 percent or 34,000 during the year. However, the total youth segment of the population, ages 16 through 19, was up only slightly.

Two Connecticuts?

Demographically, the characteristics of Connecticut's people have changed little from the description in last year's annual report, *Meeting the Challenge, 1984*. They are highly educated and comparatively wealthy. And yet the dichotomy between literate and illiterate, rich and poor, is becoming more apparent.

More than 70 percent of adults over 25 years of age have high school diplomas and nearly 30 percent of these adults have four or more years of college. Yet approximately 600,000 state residents over the age of 20 lack high school diplomas.

The state's per capita income is the highest in the continental United States and is increasing about seven percent per year. At the same time, more than 50,000 families in the state have incomes below the poverty level and the number is growing. Census analysts point out that the gap in earning power between college graduates and high school graduates is growing. Contributing to the increase in poor households is the growing number of functional illiterates, whose basic skills are not sufficient to qualify them for even entry-level unskilled jobs. Most disadvantaged are the children in households headed by a female, with no male present; their median income is less than half that of two-parent families.

Concern that two societies are developing, nationally and in Connecticut, is growing. C. Emily Feistritzer, director of the National Center for Education Information, cites some demographic factors that will have significant impact nationwide on the school population and the support for public education.

- The proportions of poor and nonwhite students entering school in 1985 are higher than in the population as a whole.
- Enrollment of three- and four-year-olds has jumped more than 80 percent in the past ten years, but two-thirds are in private schools.
- The majority of people who pay public school costs have no children attending schools. Nearly two-thirds of today's households do not have children, and the fastest-growing household populations in the nation are people who are not married and do not have children.

Connecticut's Economy

During 1984-1985, the state's economy was robust and a modest improvement is expected during the balance of the eighties.

There were 1.6 million persons employed in nonagricultural jobs in 1984. Economic conditions were more favorable than at any time in 15 years, according to the Connecticut Labor Department, and most of the growth in the labor force in the eighties took place during 1984.

The labor force is increasing faster than the population. In 1984, 68.2 percent of adults were working or looking for work. Participation by blacks is up and a higher percentage of blacks than whites found employment in 1984. There are 30,000 fewer women outside the labor force than in 1983; women not working outside the home numbered 532,000 in 1984.

Participation by 16-to-19-year-olds is down. The number of youths outside the labor force increased by 5,000 even though the overall youth unemployment rate decreased to 13.3 percent in 1984 from 16.5 percent in 1983.

Connecticut's overall unemployment rate, the lowest in the 48 states, was under five percent for all of 1984-1985. Nevertheless, there are job shortages and higher unemployment in certain regions of the state, particularly in eastern Connecticut and in the New Haven area. Fostering a certain amount of mobility in the work force and educating and training adults, including dislocated workers, are imperative if Connecticut is to maintain a semblance of balance between supply and demand.

A large portion of Connecticut's income comes from the defense industry—machines, electrical equipment, transportation and high technology. The preponderance of job opportunities since 1980, however, has been in the nonmanufacturing sector. Service businesses pushed past manufacturing in 1984 as the largest provider of jobs, nearly 421,000 workers, and service jobs are expected to grow from 25 percent of the economy to 31 percent by 1995. This will result in 62,000 new jobs in service occupations.

Jobs

Over the next ten years Connecticut will add more jobs to its economy than it will have people to fill them. That is the conclusion of *Jobs for Connecticut's Future*, a privately financed study. The number of jobs will grow by 189,000, or 15 percent, by 1995 while the labor force will grow by only ten percent. Can Connecticut avoid a critical mismatch between jobs and people? Ensuring a competent work force is part of the role of the public schools.

The Connecticut Department of Labor describes the job outlook for the balance of the decade as generally bright, strengthened by the diversity of the state's economy and its move away from heavy dependence on manufacturing. A look at some major job categories may lend perspective to the task facing educators.

- **Professional and technical.** In 1984 twenty percent of the work population was in the professional and technical employment category and a 13 percent increase is expected by 1990. The total number of teachers, however, is expected to decline, although an estimated 11,000 additional workers will be needed between 1984 and 1990 to replace those lost to the profession through death and retirement.

- **Managers, officials and proprietors.** About ten percent of the working population in Connecticut holds positions in this classification. Growth of approximately 12 percent is forecast with significant increases expected for store managers and wholesalers.

- **Sales.** Nearly half of the positions in the sales field are sales clerks and the demand will remain heavy. The number of technical sales representatives will increase by a projected 20 percent with many replacements required by 1990.

- **Clerical.** More than one of every five working persons in Connecticut is a clerical worker. This is the largest occupational group and its numbers are expected to increase by more than the average 15 percent between 1985 and 1990.

- **Construction.** The construction industry is also booming. An estimated 59,700 construction workers were employed during 1984, the most since 1973. The number will average over 61,300 by 1990.

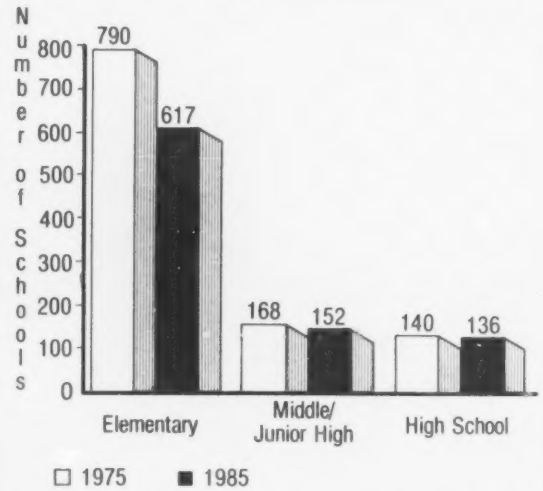
- **Services.** The business services industry is expected to hire the greatest number of new workers, more than 22,500 between 1984 and 1990, in two areas: data processing services and temporary employment services. Health services, the largest employer of service workers with 113,000 in 1984, is projected to add 16,800 workers from 1984 to 1990. Finance, insurance, real estate and banking jobs are expectd to increase by ten percent. Gains are also anticipated in transportation, amusement and recreation, and hotels and conference centers. Growth in government administration will be slight and no major change is expected in the communications and utilities fields. The growth in government administration will be slight and no major change is expected in the communications and utilities fields.

Most of the new jobs will be in small and medium-sized companies without training resources. Virtually all new jobs will require competency in basic skills. Equally essential are critical thinking, problem-solving and interpersonal abilities.

The challenge to the public schools is all-encompassing: to prepare individuals of all ages from widely different social and economic backgrounds for a diversity of careers and lifestyles. The data and analyses that follow indicate how Connecticut's public schools are meeting that challenge.

Connecticut's Schools

The period of public school closings appears to be over. The rate of decline in the number of public schools, which paralleled the movement of the baby boom through the nation's schools, slowed in Connecticut in 1984-1985. Only three schools closed and a new alternative school



Fall of School Year	Elementary	Middle/ Junior High	Senior High*	Alternative/ Prekindergarten/ Special Education	Total
1985	617	152	136	32	937
1984	618	153	137	31	939
1983	621	155	138	35	949
1982	643	160	139	36	978
1981	669	163	140	39	1,011
1980	695	166	140	38	1,039
1979	713	169	140	35	1,057
1978	733	171	140	36	1,080
1977	753	170	140	35	1,098
1976	774	169	140	34	1,117
1975	790	168	140	33	1,131

*Excludes E.O. Smith, Gilbert, Norwich Free, and Woodstock Academies and alternative high schools.

Source: CT Department of Education

opened. Thus, the total number of public schools in Connecticut stands at 937. This is a significant change in the trend of the past decade when closings reached a high point of 33 schools closed in 1982 and averaged 19 annually.

The greatest number of closings during the past ten years was among elementary schools but enrollments at this level have now stabilized. Decline has advanced to the secondary level and the number of students entering the state's high schools will continue to drop for another decade. At this level, however, most school districts have only one or two high schools and cannot manage declining enrollments by closing schools. It will be necessary to make accommodations through innovative measures such as staff sharing, collaborative planning and purchasing, transporting students and using instructional technology. To encourage local school districts to undertake such cooperative efforts, the State Board of Education's 1986-1987 requested budget seeks increased funding of $1.1 million for a competitive grant program which addresses the problem of declining enrollments by providing an incentive to develop and implement cooperative programs among local and regional school districts and regional educational service centers as well.

The state operates the Regional Vocational-Technical School System. These schools offer full-time secondary school programs, as well as part-time programs which enroll many adults, in 17 schools and at four satellite locations. The State Board of Education is the system's governing body. During 1984-1985, as part of the reorganization of the State Department of Education, administration of the vocational-technical schools was assigned to a superintendent of schools to ensure that the system receives the management oversight it requires.

In addition to local, regional and state-operated public schools, nonpublic schools provide choice for the state's parents and students. Of the 386 nonpublic schools in Connecticut in 1984-1985, 194 were Catholic schools (three fewer than the previous year), 51 were other religious (seven more than in the previous year), 81 were independent schools (three fewer than the previous year) and 50 were special education schools (four fewer than the previous year). Many of these nonpublic schools serve primarily state students, but a number of nationally and internationally recognized independent secondary schools enroll students from around the world.

Link to the Nonpublic Schools

The State Department of Education administers schools and program approvals to ensure the quality of education in private occupational, nonpublic and public schools, and in private special education facilities.

Nonpublic Schools. The Advisory Council for School Approval, established by the State Board of Education in 1982, recommends approval of schools and programs to the State Board of Education. This is part of the state's voluntary school approval process. The Council generally acts upon the recommendation of recognized accrediting agencies including the New England Association of Schools and Colleges; Connecticut Association of Independent Schools; the Hartford, Norwich and Bridgeport Diocesan School Offices; Association of Christian Schools International, and the Elementary and Middle School Principals' Association of Connecticut. These groups voluntarily seek state recognition of member schools as official acknowledgment of quality standards. In 1984-1985, the State Board of Education approved 31 public and nonpublic schools.

Private occupational schools. The Bureau of Adult Education monitors 100 private occupational schools and branches to assure they meet acceptable standards of operation. Compliance with provisions of the Connecticut General Statutes is mandatory and schools must be approved in order to operate. The Bureau of Adult Education also administers the Student Protection Fund, a revolving fund of approximately $650,000 which ensures tuition refunds to students attending private occupational schools which cease operation.

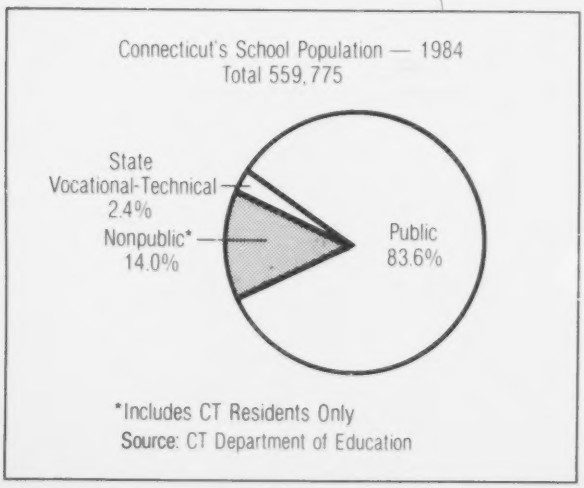
Special education facilities. Special education facilities which provide services to handicapped students are

also legally required to be approved by the State Department of Education. There are 60 nonpublic special education facilities in Connecticut. These facilities serve approximately 3,100 students, most of whom are referred by local school districts. Programs and institutions providing day and residential services for handicapped students are also approved by the department.

Student Population

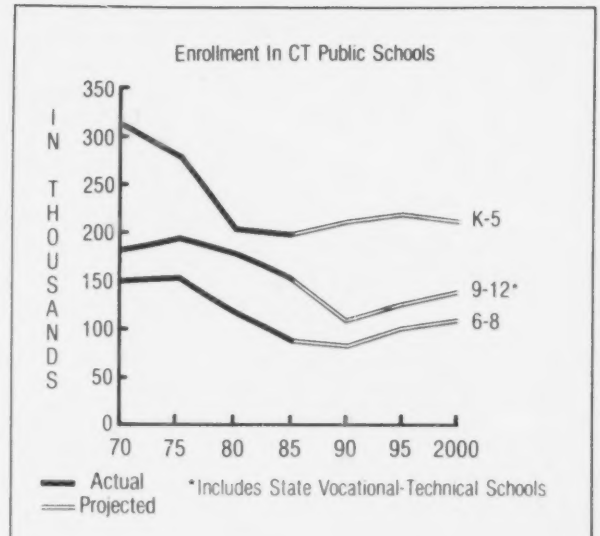
From the fall of 1983 to the fall of 1984, kindergarten through grade 12 enrollment in Connecticut's public and nonpublic schools decreased by just over 12,000. The number of students declined from 571,797 to 559,775, a decrease of two percent. Over the past decade, enrollment has declined by 184,239, or 24.8 percent.

Also over the last decade, the percentage of students enrolled in public schools went from 87.3 percent of the total enrollment to 83.6 percent; vocational-technical school enrollments rose from 1.5 to 2.4 percent, and nonpublic schools increased from 11.2 to 14.0 percent. In 1984, however, for the first time in the past ten years, the percentage of students enrolled in public schools did not decline.



Public school enrollment in grades K-5 peaked in 1970 and then declined 39.4 percent by 1983. In 1984, for the first time in a decade, enrollment in grades K-5 increased. Increased enrollment in these grades is expected to continue through 1995 and then to decline again. Enrollment in grades 6-8 peaked in 1974, declined by 36.8 percent by 1985 and is expected to decline an additional 5.9 percent by 1987 before beginning to increase. The decline in enrollment in grades 9-12, which began nine years ago, is projected to continue. After reaching a high point in 1975, enrollment in grades 9-12 declined 23.7 percent by 1985. An additional 23.6 percent decline by 1991 is expected before an upswing begins.

The State Department of Education projects that total enrollment will continue to decline through the 1980s. It is estimated that a low point in enrollment, 450,102, will occur in 1989 and then an increase will begin with enrollment reaching 483,497 in the year 2000. While Connecticut's enrollment decline parallels the national trend, it is much deeper. The decline in the state's birth rate was steeper than the drop nationally and the projections for the state suggest that student enrollment will decline more than for the nation as a whole.



School Year	K-5	6-8	9-12[1]	Non-graded[2]	Total
			Actual		
1970	324,390	151,618	183,208	11,930	671,146
1975	282,281	152,686	200,954	16,456	652,377
1980	219,597	124,655	181,818	22,756	548,826
1985[3]	200,419	98,165	153,378	23,411	475,373
			Projected		
1990	220,007	95,374	117,960	23,411	456,752
1995	230,193	104,929	125,822	23,411	484,355
2000	218,472	109,042	137,051	23,411	487,976

[1] Includes vocational-technical schools
[2] Includes prekindergarten, special education ungraded elementary students at the Department of Children and Youth Services, ungraded secondary at the Department of Corrections and adults enrolled in secondary programs in vocational-technical schools.
[3] Unaudited

Source: CT Department of Education

When considering estimates such as these, it is important to keep in mind that projecting enrollments is not an exact science. The five-year projection made in 1979 for 1984 was within 1.1 percent of the actual 1984 enrollment, but preliminary data analyzed by the State Department of Education seem to indicate that current projections slightly underestimate future enrollment.

Minority enrollment. The enrollment of minority students in Connecticut public schools continues to rise. In 1984-1985 there were 1,583 more minority students and this population constituted 21.1 percent of the total enrollment compared to 14.1 percent ten years ago. The gain over the previous year is 1.6 percent.

Over the past decade, as the birth rate for the black population declined, the number of black students also declined; in 1984 there were 321 fewer black students than in 1983. The increase in minority enrollment has

resulted from the larger number of other minorities, especially Hispanic students. While the number of black students has declined by 6,800 in the past ten years, and the number of Hispanic students increased 7,593, the number of other minorities (including Asian Americans and American Indians) increased 4,363. In the state's five largest cities, minority enrollments have remained relatively stable over the past decade—61,565 in 1974 compared to 61,802 in 1984—but the effect of overall declining enrollments in the same period has been to increase the proportion of minorities enrolled in these cities from 56.0 percent to 72.1.

Minority Enrollment in the Public Schools

Fall of Year	Minority Enrollment	Pct. of State Enrollment	Black	Hispanic	Other [1] Minority
1984	100,125	21.1	56,126	36,264	7,735
1983	98,542	20.3	56,447	34,897	7,198
1982	97,301	19.5	56,468	33,815	7,018
1981	97,208	18.8	57,903	32,789	6,516
1980	97,438	18.0	59,167	32,443	5,828
1979	96,467	17.2	60,149	31,277	5,041
1978	96,467	16.5	61,207	30,446	4,814
1977	96,657	15.9	62,407	29,899	4,351
1976	95,338	15.1	62,619	28,882	3,837
1975	94,969	14.7	62,926	28,671	3,372
1974	92,083	14.1	62,352	26,911	2,820

[1] Includes American Indians and Asian Americans

Source: CT Department of Education

Vocational-technical schools. In 1984-1985, the vocational-technical schools enrolled 7.7 percent of all public high school students in Connecticut; in 1980-1981 the percentage was 6.6 percent. Despite enrolling a larger share of public high school students, enrollment in these schools declined by four percent between 1983 and 1984. In the fall of 1984, total enrollment, including all day, evening, and full-time, part-time and apprentice students, was 19,651. Of this number, 77.6 percent was male and 22.4 percent was female.

Vocational-Technical School Enrollments* In Secondary Full-Time Day Program

	1980	1982	1984	Percent Change 1980-1984
Total	11,996	12,324	12,086	+ 0.8
Minority	1,693	2,045	2,250	+32.9
Handicapped	705	989	1,176	+66.8

* As of October 1 each year

Source: CT Department of Education

Enrollment of secondary full-time, day-program students has declined by two percent. The decrease in the number of secondary school age students has meant that it is possible for the majority of vocational-technical schools to enroll a higher percentage of students who wish to attend. For 1984, 67 percent of the applicants, the highest percentage ever, was accepted and, for the first time in six years, the percentage of students accepted to those actually enrolled increased over the previous year. (The fact that not all students who are accepted choose to attend means that students who are not initially accepted are able to enroll.)

There was significant variance in the acceptance rate among the schools. The highest acceptance rate, 100 percent, was at Ellis in Danielson, the lowest, 45 percent, at Bullard-Havens in Bridgeport. The State Department

Fall Enrollment in Public and Nonpublic Schools

School Year	Local [1] Public		Vocational- [2] Technical		Nonpublic [3] Schools		
	Number	%	Number	%	Number	%	Total
1984	468,169	83.6	13,207	2.4	78,399	14.0	559,775
1983	477,806	83.5	13,603	2.4	80,388	14.1	571,797
1982	492,470	83.9	13,605	2.3	81,196	13.8	587,271
1981	512,159	84.4	13,472	2.2	81,498	13.4	607,129
1980	535,701	85.1	13,125	2.1	80,315	12.8	629,141
1979	556,634	85.8	12,527	1.9	79,893	12.3	649,054
1978	581,171	86.2	12,511	1.9	80,171	11.9	673,853
1977	603,925	86.7	12,464	1.8	80,403	11.5	696,792
1976	623,177	86.9	11,823	1.6	82,195	11.5	717,195
1975	640,879	87.2	11,570	1.6	82,552	11.2	735,001
1974	649,772	87.3	11,017	1.5	83,225	11.2	744,014

[1] Includes E.O. Smith, Gilbert, Norwich Free and Woodstock Academies, the Department of Children and Youth Services, the Department of Mental Retardation and the Department of Corrections.
[2] Includes adults enrolled in programs of at least 500 hours duration.
[3] Includes residents of Connecticut only. Enrollment for 1974 is an estimate.

Source: CT Department of Education

Average Attendance in Connecticut Public Schools

Year	Percent Attending All Districts	Large Cities*
1984-85	93.4	91.0
1983-84	92.5	89.9
1982-83	92.9	88.8
1981-82	92.4	88.7
1980-81	92.9	89.7
1979-80	92.6	89.7
1978-79	92.4	88.3
1977-78	92.0	87.9
1976-77	92.3	87.8
1975-76	92.7	89.6

* Bridgeport, Hartford, New Haven, Stamford and Waterbury

Source: CT Department of Education

The average daily attendance of 93.4 percent of the total public school enrollment in 1984-1985 was the highest in the past ten years. The figures are based on the actual attendance on two school days, one in October and one in May. While attendance in the state's five largest cities also improved in 1984-1985 and came closer to the state average, it is still lower than other districts in the state.

of Education estimates that by 1992, 15 of the 17 vocational-technical schools will be able to accommodate every student who applies; the exceptions are the schools in Bridgeport and Waterbury. There has been a dramatic and sustained increase in the number of minority and handicapped students enrolled in vocational-technical schools. Since 1980 (the first year for which data are available) the number of minority students has increased by 32.9 percent and the number of handicapped students is up 66.8 percent.

More information about vocational-technical school programs, and also about programs for the student populations noted below, is provided in Section 3, Programs.

Special education. Classes, programs and services designed to meet the educational needs of handicapped children are mandated in state and federal law concerning special education. Included in the general category of children in need of special education are students who are mentally retarded, physically disabled, speech impaired or emotionally disturbed. Students who are academically or artistically gifted and talented are also considered exceptional under state law, although programs for them are permissive rather than mandatory.

Local school districts are required to identify children who may benefit from special education. The results of these efforts are reflected in the increased numbers of students receiving special education. From 1977-1978 to 1984-1985, special education enrollment (excluding gifted and talented students) in Connecticut increased from 10.02 percent to 13.68 percent. An estimated 13,000 students have been identified as gifted and talented.

Bilingual education. The exact number of students whose proficiency in English is limited because their primary language is other than English will not be known until the State Department of Education begins to gather this data in 1987-1988. We do know that approximately 39,000 students come from homes where English is not the dominant language. The number of students who are eligible for bilingual education because there are 20 or more students with the same primary language in one school is known and reported here.

Since 1980, the number of students eligible for bilingual education has remained under 10,000. In 1984, the schools identified as eligible for bilingual education 9,942 students whose primary language was one of eight foreign languages.

The languages of bilingual education change as the population changes. In 1978, for example, there were no students eligible for programs in Cambodian, Laotian or Vietnamese. By 1982 there were 495 but by 1984 the number had decreased to 327 students eligible for programs in Cambodian, Laotian and Vietnamese. The largest group of bilingual students, 9,292 in 1984, speak Spanish. Their number increased by 302 over the previous year. The only other increase was 22 Haitian/Creole students; there had been none in the previous year. The primary languages of the remainder of the eligible students were Italian (37), Polish (28) and Portuguese (236).

For the second straight year, the number of children enrolled in public and private prekindergarten programs has declined. Thus, it appears that the dramatic increase in these enrollments between 1974 and 1980 has leveled off. While prekindergarten enrollment increased 19 percent between 1974 and 1980 when enrollment peaked at 5,972, it has now declined seven percent. A further decrease in the number of students attending public school programs may occur due to decreased federal funding for programs targeted to disadvantaged students.

Prekindergarten Fall Enrollment In Connecticut

Year	Public	Nonpublic	Total
1984	3,178	2,375	5,553
1983	3,190	2,406	5,596
1982	3,811	1,954	5,765
1981	3,888	1,747	5,635
1980	4,371	1,601	5,972
1979	4,390	1,517	5,907
1978	3,828	1,581	5,409
1977	3,808	1,272	5,080
1976	3,353	1,042	4,395
1975	3,621	1,769	5,390
1974	3,309	1,725	5,034

Source: CT Department of Education

Adult Students. Enrollment in the variety of educational programs for adults offered by Connecticut's local school districts has begun to increase after a period of decline. In the period from 1978-1979 to 1983-1984, adult enrollment declined 14 percent, but in

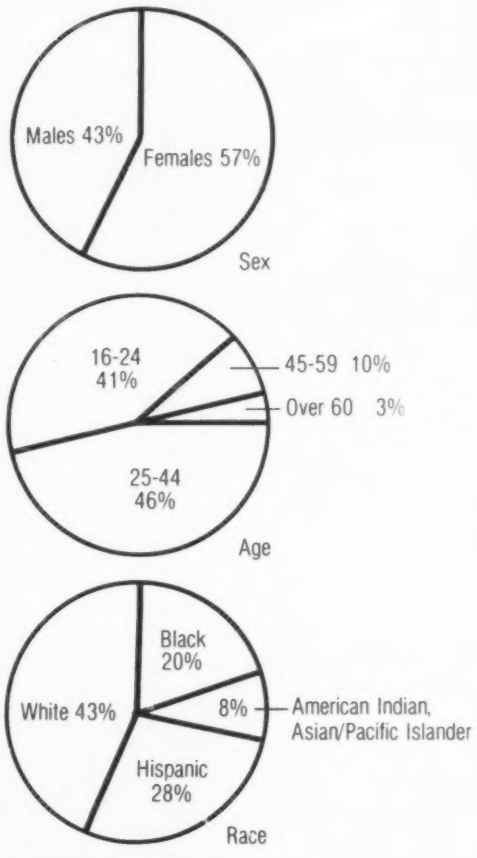
1984-1985, 138,551 adults, 14.5 percent more than the previous year, were enrolled. Of this number, 43,383, an increase of 5.6 percent over the previous year, were enrolled in programs which local school districts are mandated to provide (these include citizenship, instruction in English for those with limited English proficiency, elementary basic skills, preparation for the General Educational Development (GED) high school equivalency test and programs for earning a high school diploma by taking courses). The remaining 95,168, 19 percent more than the previous year, were enrolled in a variety of programs ranging from vocational-technical and noncredit academic classes to crafts and sports instruction.

Enrollment in Mandated* Adult Education Programs

1984-1985	43,383
1983-1984	41,064
1982-1983	39,979

* Includes basic skills, citizenship, English for the limited English proficient and high school completion.

1984-1985 Total Enrollment: 43,383



Source: CT Department of Education

Connecticut's Teachers

1984-1985 was the year of the teacher in Connecticut. The public and the press, numerous study committees and commissions, local boards of education and the State Board of Education all focused their attention on raising teacher standards, improving teacher competencies, increasing teacher salaries and teacher status. In June 1985 the Governor's Commission on Equity and Excellence in Education, appointed at the suggestion of the State Board of Education, presented its recommendation for attracting, preparing, retaining and rewarding teachers in Connecticut. While legislators, the citizens they represent, and the educational community—including teachers themselves—continued to seek equity and excellence in teaching and learning, the working environment in schools received its share of the spotlight, so did professional development.

Members of the State Board of Education continue to register strong support for the more stringent certification standards which the board proposed in December 1984; for higher teacher salaries, including a minimum starting salary; for competency testing of students planning to become teachers; and for additional opportunities for professional staff to maintain and add to their teaching skills. The board's support is apparent in its legislative proposals and budget requests, as well as through its stated goals and policies.

The objective of the proposed certification legislation is to ensure that teachers have the competencies needed to teach effectively and that they will maintain and update these skills throughout their careers. In order to retain their licenses, for example, teachers would be required to participate in ninety hours of professional development every five years. Legislation adopted in 1984 requires each local or regional board to provide in-service training for its teachers, administrators and guidance personnel. The same act requires local districts, with assistance from State Department of Education, to develop a five-year plan to coordinate staff development activities with student needs and school programs. The plans must be submitted to the State Board of Education for approval by April 1, 1986.

Both the board and the legislature agreed that improved teacher preparation and continuing professional development must be accompanied by higher beginning salaries and an improved salary schedule for all teachers if public schools are to remain competitive in hiring and retaining competent personnel. The issues were joined in 1984 when the State Board of Education and the General Assembly deferred action on proposed changes in certification, pending the recommendations due from the Governor's Commission on Equity and Excellence in Education in 1985.

Changing Profile

As the number of classroom teachers drops, their mean age, their level of education, mean years of Connecticut teaching experience and their salaries continue to rise.

In 1984 in Connecticut's 165 public school districts,

there were 36,046 full-time certified professionals. Of the total full-time personnel, 11,431 were elementary teachers; 13,755 were teachers in subject areas; 3,570 in special education; 2,536 in vocational education; 2,494 were support staff (such as counselors, school psychologists, social workers, and reading consultants), and 2,260 were administrators. Districts also employed 1,543 professionals in part-time positions.

Full-Time Teachers and Support Staff (excluding administrators)

	1978	1984	% Change
Number	37,293	33,786	- 9.4
Mean Age	38.4	41.9	+ 9.1
Mean Salary	$15,482	$24,954	+61.2
Mean Years CT Experience	10.0	13.4	+34.0

Source: CT Department of Education

A decline in the total number of administrators, noted for the first time in 1980, continued through 1984, with schools statewide reporting 68 fewer administrators than in 1980. The proportion of administrators and support staff to teachers, however, is still slightly higher than in 1978.

Administrative Positions

	% Female	% Minority
1984-85	19.5	6.6
1983-84	18.3	6.6
1982-83	17.5	6.2
1981-82	16.8	5.8
1980-81	14.2	NA

Source: CT Department of Education

Women still predominate in our public schools. They represented 62.4 percent of the professional staff, the same proportion as five years ago. In elementary education and in special education, women far outnumber men. The balance shifts, however, in administrative positions.

There were 263 women in school-level administrative positions and 178 in district office positions in 1984-1985. These numbers represented 19.5 percent of the administrative staff, the highest percentage since these statistics have been recorded. The percentage for the previous year was 18.3 while five years ago it was 14.2 percent. Over 35 percent of the subject supervisors and pupil personnel directors are women; so are about 25 percent of the general supervisors and other administrators. Women comprised 14.3 percent of the principals, 18.1 percent of vice-principals, 14.5 percent of assistant superintendents and 5.7 percent of the superintendents.

Minorities made up 5.9 percent of the full-time professional staff, 0.1 percent more than last year. They represented 6.3 percent of principals and 8.7 percent of the vice-principals.

Full-Time Certified Personnel By Sex, Race and School Level September 1984

	Total Number	Percent Female	Percent Minority
Elementary	11,431	83.0	6.6
Content Specialist	13,755	49.6	5.5
Special Education	3,570	85.4	5.1
Vocational Education	2,536	43.6	5.4
Support Staff	2,494	63.4	5.1
Administration	2,260	19.5	6.6
TOTAL	36,046	62.4	5.9

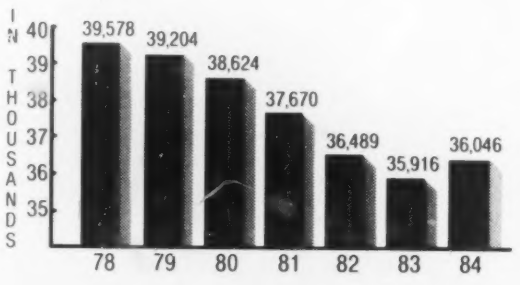
Source: CT Department of Education

The number of full-time teachers at the secondary level decreased in 1984-1985, while special education personnel increased by 108. Staff in special education has grown every year since 1978. This is also the area in which turnover was highest, with 8.1 percent leaving in 1984-1985.

Data from the field, presented in detail in the tables accompanying this text, indicate the changing characteristics of Connecticut's classroom teachers. A number of the trends reported last year continued in 1984-1985.

Number of Full-Time Staff Total Decline 8.9%

	1978 No.	1978 %	1984 No.	1984 %
General Elementary	13,186	33.3	11,431	31.7
Content Specialist	15,613	39.4	13,755	38.2
Special Education	2,881	7.3	3,570	9.9
Vocational Education	2,930	7.4	2,536	7.0
Total Teachers	34,610	(87.4)	31,292	(86.8)
Support Staff	2,683	6.8	2,494	6.9
Administration	2,285	5.8	2,260	6.3
Total Staff	39,578	100.0	36,046	100.0



Source: CT Department of Education

- The mean age of full-time teachers and support staff increased from 38.4 to 41.9 years old between 1978 and 1984, a period in which schools were hiring fewer new teachers.

- Educational attainment continued to rise. The percentage of full-time teachers and support staff with a master's degree or a bachelor's degree plus 30 hours toward a master's reached 63.7 percent in 1984. Those with sixth-year certificates or doctoral degrees accounted for another 21.1 percent. Only 15.2 have a bachelor's degree or less, and many who hold bachelor's degrees have up to 15 hours of graduate credit.

Education Level of Full-Time Teachers and Support Staff

	Percent of Staff		
Year	6th Year or Doctorate	Bachelor's Plus 30 Hours or Master's	Bachelor's or Less
1984	21.1	63.7	15.2
1983	20.5	63.4	16.1
1982	19.4	63.0	17.7
1981	18.2	62.2	19.7
1980	17.2	61.6	21.3
1979	16.8	60.4	22.8
1978	15.0	60.2	24.8
1977	12.9	59.6	27.6
1976	12.0	55.4	32.8

Source: CT Department of Education

- The average number of years of teaching experience in Connecticut has risen from 10.0 in 1978 to 13.4 in 1984.

Connecticut Experience of Full-Time Teachers and Support Staff

	Less Than One Year		25 Years or Over		Mean Number Years
Year	Number	Percent	Number	Percent	
1984	930	2.8	3,472	10.3	13.4
1983	930	2.8	3,218	9.6	13.1
1982	873	2.6	2,985	8.7	12.6
1981	1,190	3.4	2,761	7.8	11.8
1980	1,475	4.1	2,625	7.2	11.3
1979	1,840	5.0	2,453	6.6	10.7
1978	2,032	5.4	2,181	5.8	10.0

Source: CT Department of Education

- There are fewer beginning teachers. The number of teachers who have taught less than one year in Connecticut remained at 930; some were previously certified to teach but had not taught in Connecticut. While the number did not change from 1983 to 1984, it was about 1,100 fewer than five years ago. Previously, the percentage of teachers and support staff with less than one year's experience had been dropping—from 5.4 percent in 1978 to 2.6 percent in 1982—but gained slightly, to 2.8 percent in 1983 and 1984.

- The number of staff with more than 25 years' experience increased by 59 percent since 1978. In 1984, 10.3 percent of the staff had 25 years or more Connecticut experience compared to 5.8 percent seven years ago.

- The percentage of staff approaching retirement age, particularly in the 51-to-60 age bracket, continued to grow. The proportion over 60 remained relatively stable, as retirees leave, but the percentage of teachers and support staff in the 51-to-60 age group increased by nearly six percentage points between 1976 and 1984. The probability of increasing numbers of retirees during the next five to ten years appears high.

Age of Full-Time Teachers and Support Staff

Year	Percent Over 60	Percent 56 - 60	Percent 51 - 55	Mean Age
1984	3.4	7.4	10.9	41.9
1983	3.3	7.1	10.9	41.4
1982	3.1	6.6	10.6	40.8
1981	3.0	6.2	9.9	40.1
1980	2.8	6.0	9.2	39.5
1979	2.7	5.7	8.8	38.9
1978	2.7	5.5	8.4	38.4
1977	2.6	5.4	7.9	38.0
1976	3.5	5.2	7.3	37.6

Source: CT Department of Education

How Teachers Are Paid

Widespread interest and discussion about improving teachers' salaries appears to have made some impact. For 1985-1986, the median starting salary increased 13.2 percent, the largest annual increase ever recorded. In the previous year, the increase was 10.3 percent and in the period from 1976-1977 to 1983-1984, the median increased at an average annual rate of five percent. In terms of dollars and their purchasing power, however, the gains are less impressive. The median starting salary for teachers with a bachelor's degree increased since 1976-1977 from $8,770 to $15,455 for teachers entering the classroom in the fall of 1985. While this represents a 76 percent gain, it took place during a period when the consumer price index (CPI) increased by 88 percent and average starting salaries for college graduates in other fields are four to five thousand dollars higher than for teachers.

- Salaries of full-time teachers and support staff showed somewhat better gains than beginning salaries during the 1976-1985 period. The mean salary went up 96 percent while the average minimum and maximum

Starting Salaries of Teachers With a Bachelor's Degree

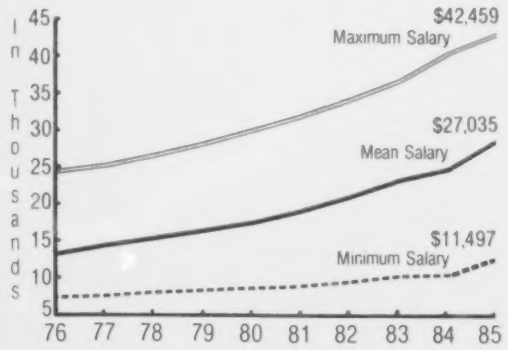
Year	Low	Median	High
1985-86	$11,497	$15,455	$20,322
1984-85	$10,819	$13,650	$17,795
1983-84	$10,250	$12,376	$16,400
1982-83	$ 9,650	$11,515	$14,570
1981-82	$ 8,917	$10,770	$13,370
1980-81	$ 8,466	$10,155	$12,653
1979-80	$ 8,097	$ 9,675	$11,937
1978-79	$ 7,900	$ 9,250	$11,350
1977-78	$ 7,700	$ 8,950	$11,070
1976-77	$ 7,400	$ 8,770	$10,826

Sources: Connecticut Department of Education
Connecticut Education Association

salaries gained 55 and 74 percent respectively. While the mean salary has nearly doubled since 1976, the rates of increases for both the maximum and minimum are nevertheless below the 88 percent growth in the CPI.

Salary of Full-Time Teachers and Support Staff

Year	Mean Salary	Minimum Salary	Maximum Salary
1985	$27,035	$11,497	$42,459
1984	$24,954	$10,819	$40,246
1983	$22,977	$10,250	$36,691
1982	$21,036	$ 9,650	$34,269
1981	$19,121	$ 8,917	$32,042
1980	$17,624	$ 8,466	$30,020
1979	$16,454	$ 8,097	$28,199
1978	$15,482	$ 7,900	$26,511
1977	$14,714	$ 7,700	$24,945
1976	$13,794	$ 7,400	$24,401



Sources: Connecticut Department of Education
Connecticut Education Association

The disparities in pay scales throughout the state relate to the geographical location of the schools and the difference in the locally negotiated salaries. A study done in 1984 by Arthur Andersen and Company for the Governor's Commission on Equity and Excellence compares teaching salaries in Hartford County with salaries in four other professions.

Salaries in Teaching and Other Careers in Hartford County, 1984-1985

Profession	Career Level: Starting	5 Years	9 Years	Percent Increase
Banking	$17,000	$24,150	$33,850	99.1
Engineering	26,780	33,000	41,000	53.1
Insurance	18,500	25,000	30,000	62.2
State Government	16,971	23,533	27,685	63.1
Teaching	14,433	16,476	19,209	33.1

Source: Arthur Andersen and Company

The average entry-level salary of Hartford County teachers, $14,433, was about $2,500 below what a person with a bachelor's degree would earn as a Connecticut Careers Trainee with the state, and about $12,000 below what a starting engineer would command. The difference widens as teachers and workers in other industries move up a career ladder. After five years, for example, the average Hartford County teacher earned from $7,000 to $16,500 less than peers in other professions. After nine years, the difference ranges from $8,400 compared to a state government employee to $22,000 compared to an engineer.

The Teaching-Learning Environment

While the year's increase in threats and assaults reverses the steady decline since 1979-1980, the overall total indicates that schools are much safer than they were four years ago when the number of threats and assaults reported was 1,218.

Reported threats and assaults by students against school personnel and other students in 165 school districts and E.O. Smith High School (and for 1984-1985, the three endowed academies) increased from 387 incidents last year to 436 incidents in 1984-1985. At the regional vocational-technical schools, 17 incidents were reported, two more than in the prior year. Student assaults, with a dangerous weapon, against other students rose by eight from last year to a total of 35 incidents. No school district, however, reported more than 34 incidents and 157 school districts reported fewer than ten incidents.

While the large and medium cities were most vulnerable, the small and emerging suburban towns were not immune; 79 of the 436 incidents involved public schools in the smaller communities.

Threats and Assaults By Students

	1979-80	80-81	81-82	82-83	83-84	84-85
TOTAL	1,218	946	665	637	387	436
Assaults	379	354	272	289	163	175
Administrator	33	24	19	22	14	11
Teacher	235	227	193	186	101	109
Student against student with weapon	67	67	36	53	25	34
Other	44	36	24	28	23	21
Threats	839	592	393	348	224	261
Administrator	118	81	63	47	38	47
Teacher	659	463	293	275	171	200
Other	62	48	37	26	15	14

Note: 1979-80 through 1983-84 data include 165 school districts plus E.O. Smith High School.

1984-85 also includes the three endowed academies.

Source: CT Department of Education

Student/Teacher Ratio

Connecticut is very proud that its student/teacher ratio, a recognized indicator of quality education, is among the lowest in the nation. It has been improving steadily since 1978, a period during which student enrollment declined at a greater rate than the staff decreased. From 1978 to 1984, for example, student enrollment declined 19.5 percent while the total staff decline was 8.9 percent and the decline among teachers and support staff was 9.4 percent. The result is a drop in the average student/teacher ratio. While Connecticut's overall average ratio of teachers to students is excellent, the disparities are great (see also Section 4).

For all districts in Connecticut, the average number of teachers per 1000 students in 1984 was 68.8, equivalent to 14.5 students per teacher. This represents a drop in the average student/teacher ratio from 16.3 in 1978. The range as shown in Section 4, is broad, from 8.79 to 19.20 students per teacher.

In the 110 districts offering programs for all grades, kindergarten through 12th grade, the number of teachers per 1000 students ranged from 86.8 to 56.5 in 1984, or 11.5 to 17.7 students per teacher. Small districts, offering elementary programs only, e.g., K-6, have less flexibility than larger districts in adjusting staff ratios, so their ratios tend to vary more from the average.

In 1984 the five top-ranking K-12 districts in number of teachers per 1000 students were: Waterford (86.8), Stamford (84.9), Bloomfield (83.6), Westport (81.4) and Darien (80.9). At the low-ranking end of the scale, with the fewest teachers per thousand students, were Seymour (59.6), New Milford (59.5), Killingly (59.4), Bridgeport (57.7) and Bethel (56.5).

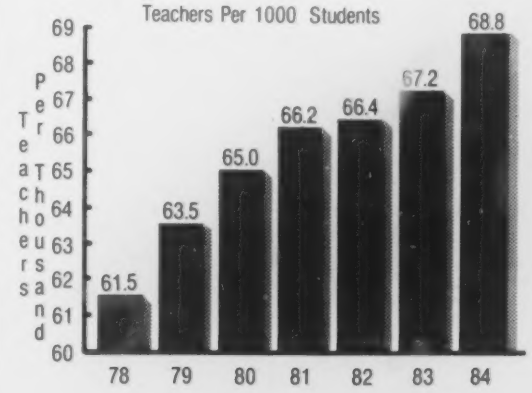
Further information on the disparities in teacher/student ratios appears in a table in Section 4. In K-12 districts, the number of support staff—counselors, psychologists, social workers and reading consultants—ranged from 10.3 to 2.4 per 1000 students. In all districts, the average number of support staff per 1000 students has increased since 1978 from 4.8 to 5.6.

Teacher Supply and Demand

Many factors expected to lead to a shortage of teachers nationwide are present in Connecticut. The number of public school teachers approaching retirement age is increasing. The state's schools of education are graduating fewer teachers and fewer high school seniors are indicating a desire to become teachers. Elementary school enrollments have started to climb again, creating a need for more new teachers. Superintendents report increasing difficulties in finding qualified teachers in specific areas, including speech and hearing, mathematics, industrial arts, physics, chemistry and, to a lesser extent, media specialists and school psychologists. While at present there is no general teacher shortage, the ingredients for a shortage to develop—particularly low salaries—are there.

Staffing Ratios In Connecticut Public Schools

Year	Average Number of Teachers Per 1,000 Students	Average Number of Support Staff Per 1,000 Students
1984	68.8	5.6
1983	67.2	5.4
1982	66.4	5.4
1981	66.2	5.3
1980	65.0	5.2
1979	63.5	5.1
1978	61.5	4.8



Source: CT Department of Education

In 1984 districts were able to employ 122 more teachers than in the prior year. They report 43 vacancies, 90 people teaching a second assignment for which they are not certified, and 62 teachers working under temporary emergency permit. Preliminary 1985 data indicate another increase in the total staff, with probable shortages in specific areas.

The demand for new staff is expected to increase by 24 percent between 1985 and 1994. The projected demand will be especially strong from 1991 through 1998. Initially much of the change will be due to the need for more elementary teachers.

Compounding the problem are a decline in the number of young people entering the teaching profession and an increase in the number of teachers leaving.

Fewer graduates. Between 1974-1975 and 1984-1985 the number of bachelor's degrees in education awarded by Connecticut colleges and universities declined 70.9 percent from 2,562 to 745. The decline averaged 11.6 percent annually over the decade, reaching 20.7 percent between 1981-1982 and 1982-1983. To illustrate what has been happening, in 1974-1975 almost one in every five bachelor's degrees awarded was in education; in 1984-1985, the figure was one in 18. The decline in number of students receiving master's degrees during that same period was 49 percent.

Number of Graduates in Education Programs From Connecticut Colleges and Universities

	Bachelor's Degree		Master's Degree*	
Year	Education	Percent of Total Degrees	Education	Percent of Total Degrees
1984-85	745	5.4	1,554	27.7
1983-84	835	6.2	1,656	28.3
1982-83	849	6.4	1,772	29.9
1981-82	1,070	8.0	1,973	32.6
1980-81	1,209	9.0	2,401	37.3
1979-80	1,292	9.8	2,325	38.2
1978-79	1,415	10.9	2,688	43.3
1977-78	1,764	12.9	2,869	44.5
1976-77	2,072	15.2	3,191	47.8
1975-76	2,314	16.7	3,337	49.4
1974-75	2,562	18.5	3,026	48.1

* Includes 6th year certificates

Source: CT Department of Education

Teacher turnover. Between 1983 and 1984 a total of 2,425 teachers left their positions. Of these, 710 or 29.3 percent retired. This number may go even higher as a greater percentage of teachers approach retirement age. Other frequently given reasons for leaving were maternity/child-rearing (15.0%), entering another profession (11.44%), and accompanying a spouse who was leaving the state (7.8%). On the optimistic side, perhaps as many as one-third of those who left—those on maternity or other leave, attending college, teaching elsewhere or affected by a reduction in force—may return to teach in the Connecticut public schools in the future.

Teacher Turnover 1983-1984: Reasons for Leaving

Reason	Number	Percent
Retirement	710	29.3
Maternity/childbearing leave	363	15.0
Enter another profession	276	11.4
Other unpaid leave	204	8.4
Spouse left state	189	7.8
Teaching elsewhere	133	5.5
Reduction in force	121	5.0
Termination	86	3.5
Enter college	83	3.4
Marriage	50	2.1
Deceased	45	1.9
Resigned, no reason	165	6.8
TOTAL	2,425	

Source: CT Department of Education

If one looks only at the dwindling supply of newly trained teachers, the turnover and the projected need for more new teachers, the conclusion might be that a teacher shortage will develop. A somewhat different picture of supply emerges, however, if supply is expressed in terms of the total number of people certified to teach in Connecticut, many of them with previous teaching experience.

Initial Teaching Certificates Awarded

Year	Total Certificates	Current In-State Graduates	Percent of Total
1984-85	3,348	1,046	31.2
1983-84	3,117	1,075	34.5
1982-83	2,872	1,136	39.6
1981-82	3,011	1,254	41.6
1980-81	3,327	1,409	42.4
1979-80	3,901	- -	- - -

Source: CT Department of Education

Between 1979-1980 and 1984-1985 there was an overall decline of 14.2 percent (553 people) in the number of newly certified. The low point was in 1982-1983 when fewer than 3,000 initial teaching certificates were issued. Since that time, the numbers have increased substantially (16.6 percent). This increase occurred despite a decline in the number of certificates issued to current graduates from Connecticut colleges and universities. These graduates now represent a smaller percentage of the total number of newly certified teachers (31.2 percent in 1984-1985, for example, compared to 41.6 percent in 1981-1982). Obviously, there are other sources of people applying for Connecticut certification. Possible explanations are that

more people are moving to Connecticut because of its robust economy or that people are applying for their certificates before testing becomes required.

The tendency in hiring new staff is to select experienced teachers.

Sources of Staff Hired in 1984

Source	Number
Returning experienced	1,416
Inexperienced teachers certified during previous year	826
Inexperienced teachers certified prior to September 1, 1983	307
TOTAL	2,549

Source: CT Department of Education

Of staff members employed in public schools in 1984 but not in the preceding year, 1,416, or 55.6 percent, were returning experienced teachers; only 826 were inexperienced teachers first certified in Connecticut during the year prior to hiring. Approximately one in four people certified in the past year obtained employment in the public schools.

Connecticut has a large reserve pool of teachers—those certified but not teaching—of about 45,000 persons under age 70. Information is not available, however, on the number who reside or teach out-of-state, teach in private schools, are employed in other fields, have no intention of ever returning to teaching, or possibly are deceased. How many may decide to return to teaching is unpredictable and their qualifications have not been reviewed in relation to proposed certification standards.

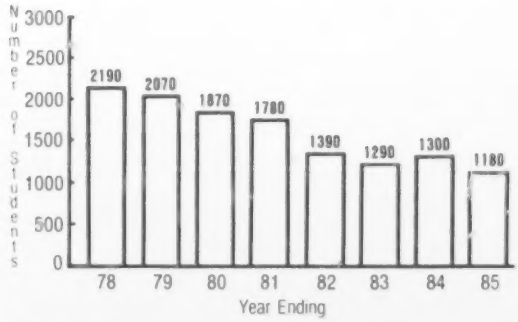
More than half of those holding certificates but not teaching in Connecticut have only provisional, not standard, certificates and those who left teaching many years ago would require considerable retraining before reentering the profession. Furthermore, there has been a major exodus of women from fields which they traditionally dominated, such as teaching, and teacher salaries have failed to keep pace with earnings in other professions requiring similar training. All of these factors make it difficult to project what the future supply of teachers will be.

Fewer prospective teacher candidates. Since 1978 the decline in the number of college-bound seniors, coupled with a significant drop in the percentage of those seniors intending to study education, has resulted in a drop of more than a thousand students who plan to prepare to teach.

According to the responses to the student descriptive questionnaire included with the Scholastic Aptitude Test (SAT), 7.1 percent of the high school students taking the SAT in 1978 in Connecticut registered an intent to enter the teaching profession. By 1985 the percentage had dropped to 4.2 percent expressing an interest in a career in education. For the entire period, the total decrease was 53.9 percent.

Connecticut High School Seniors Intending to Study Education

Year of High School Graduation	Anticipated Year of College Graduation	Percent of Students	Estimated Number of Students
1985	1989	4.2	1,180
1984	1988	4.4	1,300
1983	1987	4.2	1,290
1982	1986	4.5	1,390
1981	1985	5.7	1,780
1980	1984	6.1	1,870
1979	1983	6.5	2,070
1978	1982	7.1	2,190

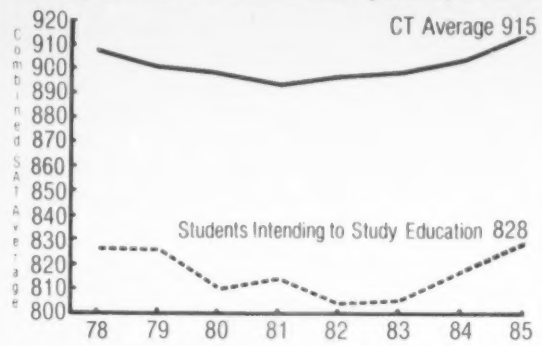


In 1978, 7.1 percent of the college-bound seniors in Connecticut registered an intent to enter education. By 1985, the percentage had decreased to 4.2 percent. Coupled with the decline in the total number of college-bound seniors, the number intending to study education has fallen over 1,000 students (46.1%) from 2,190 to 1,180 students.

Sources: The College Board
CT Department of Education

The problem of supply is as much a matter of quality as quantity. While not necessarily a good indicator of teacher quality, the SAT scores of high school seniors intending to study education is one of the few indicators available. Although their numbers have declined and their SAT scores still lag behind other college-bound seniors in the state, the scores of students expressing an interest in a career in education have improved in the past few years.

The 1985 average SAT scores of prospective teachers, for example, rose to 407 on the verbal section, up six points from the preceding year, and on the mathematics section the average score went up five points to 421, a combined total of 828 versus 915 for all Connecticut students taking the test.



Source: CT Department of Education

Combined Average SAT Scores of High School Seniors Intending to Study Education

Year	Education	State Average
1984-85	828	915
1983-84	817	904
1982-83	804	898
1981-82	803	896
1980-81	814	893
1979-80	810	897
1978-79	824	900
1977-78	825	907

Sources: The College Board
CT Department of Education

Teacher Incentives

Connecticut may avoid a general shortage of teachers and improve the quality of those entering the profession if the state acts now to make teaching a more attractive profession. Actions are needed which will increase the number of graduates from Connecticut colleges and universities who elect to enter teaching and which will continue Connecticut's appeal to teachers from other states.

Connecticut has initiated or plans to initiate several programs to improve the quality of teachers as well as to alleviate shortages in specific areas.

In 1983 Connecticut enacted an incentive loan program to attract new teachers to areas of teacher shortages. The purpose of the legislation is to provide a financial incentive for college students to enter fields that the State Department of Education has identified as having a critical shortage of teachers. Considerations are the number of teacher vacancies in a field, the number of new certifications in that field issued during the preceding year, and the number and types of classes being taught by persons whose training is not specific to the field in which they are teaching. A junior, senior or graduate student in teacher education may borrow up to $5,000 per year for two years, with the loan to be forgiven at a rate of 20 percent for each year of teaching in a shortage area in a Connecticut public school.

Teacher Incentive Loan Recipients

Shortage Area	Spring 1984	1984-85	1985-86
Chemistry	5	12	12
Industrial Arts	3	10	6
Mathematics	22	51	54
Physics	7	8	4
Speech and Hearing	12	19	25
TOTAL	49	100	101

Source: CT Department of Higher Education

Since its inception 250 loans have been granted. Juniors received 28 percent, seniors 36.8 percent, and graduate students 35.2 percent. Students in private colleges in Connecticut received 23.6 percent and the remainder went to students in the state's public colleges and universities. Of the 75 graduates of the training program, only 39 are working in public schools, according to the Department of Higher Education.

To encourage academically outstanding students to become teachers, irrespective of field, a program of Educational Loans to Encourage Excellence in Teaching (ELEET) was instituted in 1984 by the General Assembly at the request of the State Board of Education and the Board of Governors for Higher Education. To be eligible, candidates must have combined SAT scores of 1200 or above, or combined SAT scores of 1000 plus a high school rank in the top 20 percent at the end of the junior year, or either of the above plus demonstrated financial need. The required scores clearly exceed the 915 state average combined SAT score for 1984-1985 and the 828 score of those intending to study education.

Students may borrow up to $12,000 to attend a public college and up to $20,000 if attending a private college. In return, the student pledges to teach after graduation in a Connecticut elementary or secondary school. For each year of teaching, a portion of the loan will be forgiven. At the end of five years of service, the entire loan will be forgiven.

For its inaugural year, 1985-1986, ELEET generated 244 applicants, 110 of whom were awarded scholarships. Included were 85 females and 25 males. Of the total, 46 were entering their freshman year, 25 would be sophomores, 27 juniors and 12 seniors. Forty-six planned to attend public institutions and 64 were enrolling at private colleges. Fifty-one were going out of state, while 59 planned to attend Connecticut colleges.

To ensure the competence of new teachers entering the profession, Connecticut has instituted a Connecticut Competency Examination for Prospective Teachers (CONNCEPT). It was pilot tested in March 1985, preparatory to its first administration in October 1985. The test measures the candidate's knowledge and skill in

mathematics, reading and writing. CONNCEPT will be administered twice each year, in spring and fall, to college students expressing an intent to enter teacher training. A passing score on all three areas of the test will be required for admission to a teacher education program in the state.

Clearly, the most fundamental issue in attracting and retaining talented teachers is salary. Without the prospect of a reasonable wage, few persons will invest the time, effort and cost to become a teacher. Recognizing this, Connecticut's educational and governmental leaders are considering adoption of a minimum starting salary of $19,300 beginning in 1986-1987. Governor William A. O'Neill supported this in his budget recommendation to the legislature. Under consideration also is a voluntary incentive program through which the state would provide an opportunity for districts that participate to improve all teachers' salaries.

Student Achievements

Many important outcomes of education cannot be measured by objective tests. No test documents developing self-esteem, an increasing sense of responsibility, or the embracing of new aspirations even though these are often the best achievements that happen in any school. The value of individual, subjective accomplishments does not mean, however, that objectively measureable achievements are unimportant. Test results, for example, tell us whether or not students are mastering basic skills, provide one basis for comparison of schools and districts, and help identify students who may need extra help to succeed in school.

To ensure that all students learn to read, write, compute, reason and solve problems is the most fundamental task of public education. Without full command of these basic skills, few options will be open to students when they leave school. There is justification for judging the success of schools, in part, on the aggregate achievements of individual students as measured by objective data such as test scores, graduation rates and the endeavors of young people after they leave school. This section presents information about state and national testing programs, data on high school graduation and the activities of students after they leave school, and the achievements of adult learners.

State Testing Programs

Connecticut presently operates two types of state testing programs. One is designed primarily to measure students' attainment of basic skills and to help identify students who need remedial assistance; the other assesses student performance in specific subject areas and compares their performance over time with both Connecticut predecessors and national counterparts.

Basic skills achievement. Since 1980, the 9th grade proficiency test covering mathematics, language arts, writing and reading has been administered by the State Department of Education. The test, which has been a critical element in the state's Educational Evaluation and Remedial Assistance (EERA) program, is being replaced by a program of mastery testing in grades 4, 6 and 8. The new mastery test program offers several advantages:

- earlier identification of students needing remedial assistance
- testing a more comprehensive range of academic skills
- higher standards for student achievement
- more useful information about students, schools and districts
- improved monitoring of student progress over time

The new mastery test is a criterion-referenced test designed to determine the specific skills level of students; it will measure learning outcomes that most students can reasonably be expected to master by the end of grades 3, 5 and 7. The skills and objectives were identified by content experts and practicing educators from school districts statewide. The 4th grade test was scheduled to be administered for the first time in the fall of 1985 and the 6th and 8th grade tests will be given in the fall of 1986. During this initial phase of mastery testing, the 9th grade proficiency test will be administered until the fall of 1986 to ensure that all students are tested in the basic skills.

Since the initial test in the fall of 1980, scores on the 9th grade proficiency test have consistently improved in all four subtest areas (mathematics, language arts, writing and reading). While 31.4 percent of the students fell below the statewide Levels of Expected Performance (SLOEP) on one or more subtests in 1980, only 14.4 percent of those taking the test in 1984 did so. Students in large cities have shown the most dramatic improvement; between 1980 and 1984 the percentage of these students scoring above SLOEP rose from 39.9 percent to 70.9 percent in mathematics, from 71.0 percent to 88.8 percent in language arts, from 65.0 percent to 78.3 percent in writing and from 73.3 percent to 91.6 percent in reading. Nevertheless, large cities continue to have the highest percentage (39.4%) of students who, based on the test, may need remedial assistance.

The results of the October 1984 test indicated that for the first time more than 90 percent of all students exceeded the SLOEP in all four subtest areas. Other notable conclusions drawn from the test results were:

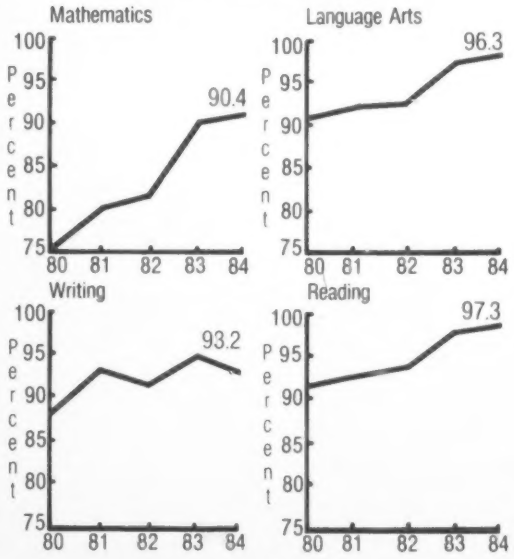
- in each subtest area except writing, the percentages of students scoring at or above SLOEP showed improvement over the previous year;
- despite the fact that mathematics scores showed the greatest improvement over the previous year, scores

for the mathematics subtest were still lowest among the four subtests;

- for the second consecutive year, 14.4 percent (5,626 students) of the test takers scored below SLOEP on at least one subtest, indicating the possible need for remedial assistance; 9.4 percent scored below SLOEP on only one test;

- in all subtests except mathematics, percentages of students enrolled in the vocational-technical schools scoring at or above SLOEP were slightly below percentages for students statewide.

Connecticut Ninth Grade Proficiency Test Results*
(Percent Above State Standards)



*Tests Administered in October of School Year

Source: CT Department of Education

Students who do not attain a SLOEP score in one or more subtest(s) are retested annually (in grades 10, 11 and 12) on the subtest(s) in which they fell below SLOEP until they score at or above the statewide standard. The 1984 test results indicate that 1,477 students in 10th grade, 647 in 11th grade and 301 students in the 12th grade need additional remedial assistance. Although large cities continue to have the highest percent of students in need of remedial assistance (39.4%), this figure has dropped by a total of 27.7 percentage points since the initiation of the test. This is an encouraging indication of the benefit of that remedial education. This positive outcome of remedial assistance for individual students is demonstrated in the performance of students who are retested. For 1984, 59.5 percent of the retested 10th graders, 54.3 percent of the 11th graders and 51.9 percent of the 12th graders passed all the retests they took.

District level standardized testing. In addition to mandating statewide mastery testing, the state EERA legislation also requires local school districts to administer standardized norm-referenced tests in a minimum of three nonconsecutive grades from 1 through 8. These tests will no longer be required when the mastery test system is fully phased in. Each district selects mathematics, reading and language arts tests to assess the achievement of elementary and middle school students. Biennially, the State Department of Education collects and analyzes information about the results of these tests to identify trends. These analyses show that Connecticut students in grades 2 through 8 perform better than their national peers on standardized tests in reading, language arts and mathematics. Moreover, with the exception of reading at the second grade level which remained the same, Connecticut students showed significant improvement between 1981-1982 and 1983-1984. The most substantial increases were made by 8th grade students in all areas and in mathematics at all grade levels.

1984 Ninth Grade Proficiency Retest Results

Grade	Mathematics No.	Mathematics %	Language Arts No.	Language Arts %	Writing No.	Writing %	Reading No.	Reading %
10	2,450	58.8	1,061	71.5	1,543	67.0	915	69.7
11	1,003	56.1	382	73.0	493	58.2	335	63.6
12	460	51.5	171	71.9	167	59.9	107	68.2

No. Indicates the number of tests taken
% Indicates the percentage of retested students passing

Source: CT Department of Education

Subject area achievement. The Connecticut Assessment of Educational Progress (CAEP) is a continuing series of statewide evaluations of what students know and what they can do as a result of their education. Since 1971 CAEP tests have assessed student achievement in reading, mathematics, science, social studies/citizenship, career education, art and music, and business and office education. By monitoring, over time, change in student performance, the CAEP program helps to identify strengths and weaknesses in curriculum areas. And because each test includes some items from the National Assessment of Educational Progress (NAEP), it is possible to compare the performance of Connecticut's 4th, 8th and 11th grade students with their peers around the country.

CAEP results are useful to local districts for planning and evaluation. Although CAEP results are reported only on a statewide, aggregate basis, local districts may choose to test a sample for their students and obtain results directly from the private vendor responsible for grading the test.

Most recent results available for a CAEP test are for the Business and Office Education test, administered in the 1983-1984 academic year. The test measured learning outcomes that are appropriate for all Connecticut students who have completed two-year sequences in secretarial, general office and accounting programs.

The Business and Office CAEP had three components—a general business knowledge test, taken by all 12th grade business and office education majors; multiple-

choice questions in each of the three major program areas; and performance tasks in each of the three program areas to allow students to demonstrate their competencies in their major field.

With this test Connecticut became the first state in the nation to test all of its 12th grade business and office education majors and also the first to assess student performance on actual skills by testing how students apply concepts in practical contexts. The standards were set by a committee composed of educators and business people.

There were 87 items on the business knowledge test. The state standard was set at 47, based on the recommendation of the business advisory committee which judged knowledge of those items necessary for entry-level employment. Eighty-four percent of the secretarial and accounting students and 61 percent of the general office students achieved scores at or above the state standard.

Performance on specific skills tasks, however, was lower and less consistent. These results generally parallel the outcomes of state and national tests in other curriculum areas which also indicate that while students can perform rote tasks and recall facts, they have more difficulty when asked to apply their knowledge in tasks requiring integration of information and selecting proper procedures to solve successfully a multi-step problem. Thus, the assessment underscores the need to teach higher-order thinking skills, not only in academic subjects, but in vocational education as well.

A CAEP science assessment was conducted during 1984-1985. This was the third assessment performed in science. The two previous assessments were conducted in 1974-1975 and 1979-1980.

1983-84 CAEP in Business and Office Education
Percentage of Students Achieving
At or Above State Standards

Test	Number of Items	State Standard	Percent Students Achieving
Secretarial			
Multiple-Choice Questions	20	12	57
Performance			
Letter Composition			
Format and Typing	12	7	70
Shorthand – 60 wpm	7	5	60
80 wpm	7	5	30
General Office			
Multiple-Choice Questions	29	17	75
Performance	17	13	39
Typing			
Words per minute	N/A	39	55
Errors per minute	N/A	1.5	40
Accounting			
Multiple-Choice Questions	51	31	50
Performance	14	8	16

Source: CT Department of Education

A new sampling design used for this assessment allowed testing of more students on more items than previously, thus increasing the scope and depth of the assessment. Comparisons of common items indicated small but positive changes in student performance at grades 4, 8 and 11. For all three grades, changes from the 1979-1980 assessment were too small to be considered educationally significant.

For the first time, the CAEP in science included a component to assess the ability of students to use skills and address problems not only with their heads, but with their hands as well. A subsample of the group of students taking the assessment was given this performance component to see how well they were able to measure, design experiments, control variables, construct circuits and work with microscopes, as well as other instruments commonly found in school science laboratories. With questions that were common to the written and the performance tests, students were more successful on the performance test. This approach to assessment permits students to demonstrate knowledge and skills that cannot be determined on written examination alone. It also highlights the importance of laboratory activity in science programs and the very positive attitudes of students to this type of experience.

A CAEP English language arts assessment was also conducted during 1983-1984. This included a fourth assessment in reading and study skills; others were conducted in the 1971-1972, 1975-1976, and 1978-1979 school years. New areas of English language arts included in this assessment for the first time were literature, listening, narrative and persuasive writing, note taking, revising and editing skills, the mechanics of written expression and computer literacy. These 1983-1984 test items constituted a substantial increase in scope and depth over the previous three assessments.

Although the most recent tests covered considerably more material, they also included items from the 1978-1979 reading assessment. Comparisons indicated only small changes in student performance on the comparable items at grades 4, 8 and 11. For all three grades, changes from the previous assessment were too small to be considered significant. This suggests that Connecticut students are reading about as well as they were five years ago. Comparison of items included on the most recent English Langauge Arts CAEP and on the 1983-1984 NAEP show that Connecticut students performed slightly better than their national counterparts.

Analysis of the English Language Arts CAEP results indicate that while student achievement in Connecticut maintains a favorable position to student achievement in the nation, there are several areas in which students need to strengthen performance. Student performance was generally good when the task required simple recognition and identification of verb forms, misspelled words and mistakes in capitalization apart from written context. Likewise, student performance was generally good when asked to answer literal questions about what they heard or read. However, students had greater difficulty when asked to analyze, evaluate, reason or apply a skill within the context of actual writing, listening, and reading. Interestingly, although students demonstrated a clear understanding of the mechanics of writing and revising,

they exhibited difficulty in effectively supporting their own points of view and supporting their own narrative techniques. Similarly, while many students could agree or disagree with an assertion, only a much smaller percentage validly supported their positions.

National Testing of College-Bound Students

National standardized testing of students seeking admission to college was initiated at the turn of the century by a small group of colleges, which organized the College Entrance Examination Board (The College Board), to aid their evaluation of applicants from school districts across the nation. Through the years, as more and more colleges required applicants to take The College Board tests, the examinations have come to be considered one measure of student educational achievement. Through these tests it is possible to monitor the performance of public and nonpublic school students who are planning to attend college. Each year The College Board provides the Connecticut results for three of its national testing programs (1) the Preliminary Scholastic Aptitude Test/ National Merit Scholarship Qualifying Test (PSAT/ NMSQT); (2) the Scholastic Aptitude Test (SAT) and Achievement Tests, and (3) the Advanced Placement (AP) tests.

Preliminary Scholastic Aptitude Test and National Merit Scholarship Program. Many students who plan to attend college elect to take the Preliminary Scholastic Aptitude Test in the fall of their junior year in high school.

Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) Average Scores For College-Bound Juniors

Test Year	Expected Year of Graduation	Verbal		Mathematics	
		Connecticut	Nation	Connecticut	Nation
1984	1986	42.4	41.0	44.6	44.2
1983	1985	42.4	40.9	45.3	44.7
1982	1984	42.3	41.1	45.0	44.7
1981	1983	42.8	41.5	45.6	45.1
1980	1982	41.9	40.6	45.2	45.2
1979	1981	41.6	40.3	45.3	45.3
1978	1980	42.2	40.6	45.3	44.8
1977	1979	41.5	40.0	44.3	44.2
1976	1978	41.7	40.5	45.2	45.0
1975	1977	41.9	41.1	45.6	45.5
1974	1976	42.7	41.6	46.2	45.9

Source: The College Board

The test is not only a helpful trial run for the SAT, it is also used by the National Merit Scholarship Corporation as the basis for determining scholarship semifinalists and letter of commendation recipients.

The PSAT is a somewhat shorter and easier version of the SAT; the PSAT consists of verbal and mathematics sections with a scoring scale of 20-80. For the 1984 administration of the PSAT Connecticut students averaged scores slightly higher than their peers across the country. State students' average verbal score (42.4) was 1.4 points higher, the mathematics average (44.6) was 0.4 points higher. The statewide average verbal score was the same as the previous year while the mathematics score declined slightly, 0.7 points.

All students who take the PSAT are automatically considered for a scholarship award or recognition, which is made two years later when they enter college, through the National Merit Scholarship Program. The highest scoring students are designated semifinalists. In the Merit Program year 1986 (based on PSATs taken in 1984), 225 students from 79 public and nonpublic schools in Connecticut were semifinalists. Students with high scores (but below the semifinalists) receive letters of commendation. In the Merit Program year 1986, 965 students from 163 of Connecticut's public and nonpublic schools were designated to receive letters of commendation. This represented 4.03 percent of those who took the PSAT in Connecticut, compared to the national average of 3.16 percent of the test takers winning letters of commendation. Connecticut students receive more letters of commendation than might be expected; for 1986 they received 2.7 percent of the letters of commendation, but represented 2.1 percent of the PSAT takers and an estimated 1.5 percent of the nation's 11th graders (in 1984). Also positive is the fact that these students attend a widely representative number of Connecticut schools.

National Merit Scholarship Program

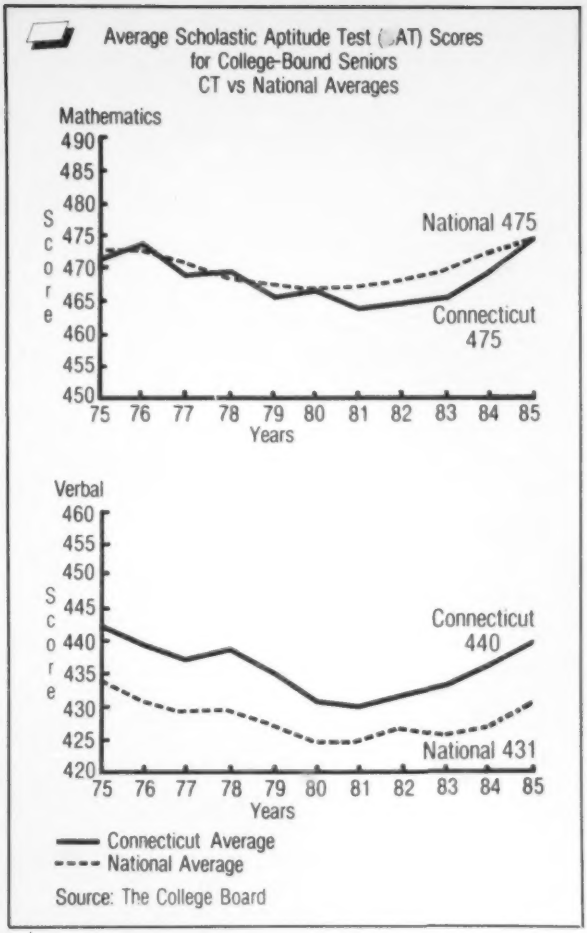
Merit Program Year	Number of Schools	Connecticut Commended Scholars	Percent Commended	
			CT	Nation
1986	163	965	4.03	3.16
1985	157	1,004	4.46	3.25
1984	166	1,074	4.34	3.24
1983	173	1,190	4.47	3.18
1982	170	1,151	4.23	3.24
1981	171	1,086	4.04	2.96

Source: National Merit Scholarship Corporation

Scholastic Aptitude Test. According to The College Board, the SAT "is a measure of basic reasoning abilities in two areas: verbal and mathematical." College admissions officers use test results to supplement a student's high school record because the SAT has proved valid as a predictor of success in college.

The higher scores on SATs taken by Connecticut students during 1984-1985 represented the fourth consecutive year of improvement. The average SAT verbal score rose four points to 440 and currently stands at the second highest level since 1975. The average mathematics score rose seven points to 475, the highest level in the last ten years. These gains represent the largest single-year improvements since Connecticut began reporting data in 1969.

The performance of Connecticut students is particularly noteworthy since the state continues to have the highest percentage of students taking the test. In 1984-1985, 66.2 percent of the state's seniors took the SAT



compared with a national participation rate of about 33 percent. According to The College Board, generally speaking, the higher the participation rate, the lower the average scores for the state. Thus, because of its high population rate, Connecticut could reasonably be expected to show lower scores than the national averages, and so its higher scores are especially commendable. Connecticut's average verbal score continues to compare favorably, standing nine points higher, with national averages, while the mathematics average equalled the national average for the first time in a decade.

Further encouraging statistics show that the percentage of students scoring 600 or better on the verbal section has risen to 9 percent, a ten-year high for the state. The 17.5 percent scoring above 600 on the mathematics section is the highest since 1971. At the same time, the percentage of students scoring below 300 decreased on both sections. These shifts at both ends of the scoring range indicate overall improvement in student performance.

Although the gap between the SAT scores of white and minority students has narrowed since first recorded in 1975-1976, the rate of minority student improvement has slowed since 1980-1981. The scores of black and Hispanic students are still significantly lower than those of whites. Oriental students average 35 points lower on the verbal section, but their average mathematics score is 30 points higher. Comparison of achievement of subgroups of students on the SAT is one of the benchmarks by which progress toward meeting the goal of ensuring educational equity for all children will be measured.

Test of Standard Written English. Since 1974-1975 the SAT has included the Test of Standard Written English (TSWE) which evaluates, on a scale of 20 to 80, students' ability to recognize standard written English. On this test the average Connecticut score rose by 0.1 point to 43.4, marking the third consecutive year of improved state scores. Female students continue to outperform males on this test, but the difference is narrowing; for 1984-1985 it was 1.5 points.

Achievement Tests and Advanced Placement Tests. Unlike the verbal and mathematical sections of the SAT which measure general verbal and mathematical aptitude, achievement tests measure how well a student performs in a subject area. The College Board notes that high scores on the Achievement Tests "depend to a considerable extent on the opportunities offered in secondary school for learning the particular concepts and skills measured by the tests." In 1984-1985, 10,155 Connecticut students, 35.2 percent of the SAT takers, chose to take at least one achievement test; this compares to 20.8 percent nationally.

Scores range from 200 to 800. Substantial gains were made over the previous year with the average English composition score up seven points, biology up nine, French up 18, Spanish up 13, and literature up seven points. Lower scores were recorded in physics, down nine points; mathematics level two, down nine points; Latin, down two points, and Hebrew, down eight. Among the six tests selected most frequently by Connecticut students, state scores exceeded national averages only in English composition (2 points higher). State students' averages were lower than national averages in mathematics level one (4 points), American history (4 points), biology (13 points), chemistry (9 points) and mathematics level two (7 points).

Test of Standard Written English
Average Scores of College-Bound Seniors
Scale: 20 to 80

	Males		Females		Total	
	CT	Nation	CT	Nation	CT	Nation
1984-85	42.6	42.0	44.1	43.1	43.4	42.7
1979-80	42.3	41.7	43.7	43.0	43.0	42.4
1974-75	43.0	42.2	45.4	44.3	44.2	43.2

Source: The College Board

The College Board's Advanced Placement examinations give any high school student (not only those enrolled in high school advanced placement courses) an opportunity to demonstrate college-level achievement for which they may receive college credit or exemption from required courses. In May 1985, 4,533 students, 58.2 percent of them female, from 155 public and nonpublic Connecticut schools took a total of 6,202 Advanced

Placement examinations. A slight majority of the test takers, 51.1 percent, attended public schools. A higher proportion of students enrolled in nonpublic schools take the tests, however; in 1985, while 4.5 percent of all public high school seniors and 1.9 percent of the juniors took an AP test, 17.2 percent of the nonpublic school seniors and 10 percent of the juniors took a test.

Advanced Placement Test Participants

Year	Number of Schools	Number of Students	Number of Examinations	Percent Scores Three or Better*
1985	155	4,533	6,202	74.8
1984	155	4,220	5,757	76.5
1983	154	3,790	5,115	76.0
1982	143	3,604	4,934	75.0
1981	143	3,570	4,817	76.0
1980	139	3,111	4,190	77.0
1979	133	2,749	3,602	77.0

* Test score scale is from 1 to 5.

Source: The College Board

Advanced Placement tests are scored on a scale from 1 to 5 with most colleges granting credit for a score of 3 or higher. In 1985, 74.8 percent of the AP examinations taken by Connecticut students received a score of 3 or higher; this is a decline from 1984 when 76.5 percent scored at 3 or better. Nationally 67.1 percent of students scored at this level. The average scores of Connecticut public school students were higher than both nonpublic school students in the state and students across the nation. While 75.4 percent of the public school test takers earned scores of 3 or higher, the national average was 65.7 percent; 74.1 percent of the state's nonpublic school students taking the test achieved scores of 3 or better.

Advanced Placement Test Results
May 1985

Score	Number of Students* Public	Nonpublic	Total
5	482	517	999
4	820	735	1,555
3	1,022	1,060	2,082
2	551	604	1,155
1	206	205	411
TOTAL	3,081	3,121	6,202
Mean	3.27	3.24	3.25

* Some students took more than one test.

Source: The College Board

Mean Years of Study

Since 1974-1975, the mean number of years of study, as reported to The College Board by students taking the SAT, have increased in English, mathematics, physical sciences and social studies and declined in foreign languages and biological sciences. Over the past decade, notable changes in the pattern of courses taken include the increase in the number of mathematics courses reported, the decline followed by a slight rebound in the foreign language courses, and the increase for physical sciences. Compared to ten years ago, Connecticut's college-bound females now report taking the equivalent of 3/4 more of a semester of mathematics and 2/3 more of a semester of physical science; males report a similar increase in the number of physical science courses taken. (The discussion of graduation requirements, pages 26-27, also provides information about subject area study.)

Mean Years of Study, By Subject
Reported by College-Bound Seniors

Course		1974-1975	1984-1985
English	Males	4.00	4.01
	Females	4.04	4.06
Mathematics	Males	3.67	3.88
	Females	3.30	3.68
Foreign Languages	Males	2.26	2.51
	Females	2.96	2.93
Biological Sciences	Males	1.49	1.39
	Females	1.55	1.47
Physical Sciences	Males	1.78	2.10
	Females	1.43	1.76
Social Studies	Males	3.02	3.14
	Females	2.85	3.01

Note: In interpreting mean years in the table, 0.25 is equivalent to a half semester and 0.50 equivalent to a full semester or a half year.

Source: The College Board

High School Graduates

For the past four years, the number of diplomas awarded has remained relatively stable, totalling just over 50,000 annually. In 1984, however, the number of diplomas, 46,999, represents a six percent decrease over the previous year. The largest factor contributing to the decline is the significant decrease in the number of diplomas awarded by local public schools since enrollment decline has now entered the state's secondary schools. Nonpublic school diplomas have declined only slightly while vocational-technical schools increased slightly and diplomas awarded through the general

educational development program (GED) declined 14 percent. The rate of increase in the number of vocational-technical school graduates has slowed in recent years as indicated by the 1984 increase of just 1.1 percent over the previous year's number of graduates (which, in turn, had been a decline over the prior year).

Based on demographic trends, the State Department of Education projects that the number of diplomas awarded by the local public schools and the vocational-technical schools will continue to fall, reaching a low point of fewer than 25,000 by 1994, before beginning to increase.

Graduation rate. The high school graduation rate—the percentage of students who graduate from high school four years after they enter 9th grade—is often considered a measure of educational success. In 1984, the number of students graduating from local public high schools was 77.8 percent of the number of 9th graders in 1980; this is a one-tenth of a percentage point decline over the previous year.

The graduation rate for students in 1984 from the state's vocational-technical schools was 72 percent, a full percentage point higher than the previous year, and up from 64 percent in 1980.

Connecticut's graduation rate continues to exceed the national average. The slight decline in the completion rate for the class of 1984 is the first such decline since the class of 1980, when the rate hit a low of 74.7 percent. Statistically significant data indicate that while the graduation rate for white students completing high school in 1983 and 1984 increased, the rates for the two major minority groups fell. It appears that 61 percent of black students and fewer than half, 45.9 percent, of Hispanic students graduate from high school four years after they enter the ninth grade.

Postsecondary education. An important indicator of educational outcome is the activities students pursue after they graduate from high school. Traditionally a high percentage of Connecticut's high school graduates continue their education and, although the total number of graduates is down, the percentage continued to rise,

High School Diplomas

Year of Graduation	Local Public	Vocational-Technical*	Nonpublic	GED	Total
1984	33,686	2,626	6,026	4,488	46,999
1983	36,204	2,503	6,229	5,216	50,152
1982	37,706	2,518	6,029	4,625	50,878
1981	38,235	2,410	6,021	3,964	50,650
1980	37,683	2,355	6,027	4,883	50,948
1979	39,727	2,206	6,186	4,310	52,429
1978	39,914	2,267	6,068	4,317	52,586

*Secondary-level occupational program completers, synonomous with graduates.

Source: CT Department of Education

Graduation Rate of Public School Students in Connecticut

Year of Graduation	Number of Graduates	Number of 9th Graders Four Years Earlier	Percent Completing
1984	36,686	43,322	77.8
1983	36,204	46,455	77.9
1982	37,706	49,706	75.9
1981	38,235	50,688	75.4
1980	37,683	50,447	74.7
1979	39,727	52,241	76.0
1978	39,914	51,510	77.5
1977	40,393	51,179	78.9
1976	40,612	52,430	77.5
1975	40,479	51,850	78.1
1974	39,340	48,723	80.7

Note: It cannot be assumed that students not graduating have dropped out of school; some may be transfers, some repeated a grade.

Source: CT Department of Education

Public High School Graduates Continuing Their Education

Year of Graduation	Total[1] Graduates	Continuing Education[2] Number	Percent	Four-Year College Number	Percent	Two-Year College Number	Percent	Vocational Program Number	Percent	Other Education Number	Percent
1984	33,686	22,005	65.3	14,866	44.1	4,554	13.5	2,002	5.9	583	1.7
1982	37,706	24,205	64.2	16,016	42.5	5,018	13.3	2,600	6.9	571	1.5
1980	37,683	23,662	62.8	16,123	42.8	4,718	12.5	2,340	6.2	481	1.3
1978	39,914	24,317	60.9	16,245	40.7	4,868	12.2	2,922	7.3	282	0.7
1976	40,612	24,418	60.1	15,930	39.2	5,229	12.9	2,965	7.3	294	0.7
1974	39,340	23,482	59.7	15,022	38.2	5,350	13.6	2,859	7.3	251	0.6

[1] Includes graduates from Norwich Free Academy, Gilbert School and Woodstock Academy; excludes vocational-technical school graduates.
[2] The activity of approximately five percent of the students is unknown.

Note: Percentages are percent of total graduates.

Source: CT Department of Education

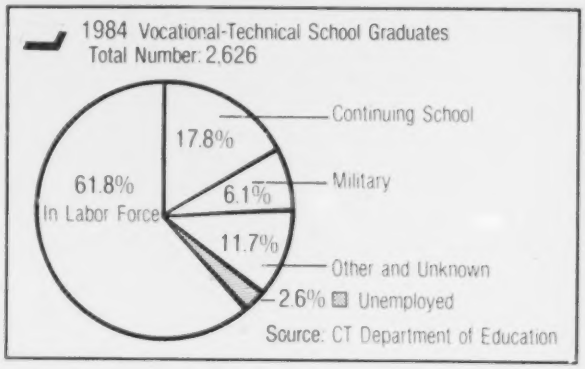
reaching a ten-year high of 65 percent in 1984. The overall increase of approximately six percent was due largely to the percentage of students attending four-year colleges. The percentage attending two-year colleges, up slightly in recent years, is approximately the same as in 1974. The percent enrolling in vocational programs has declined over the decade from 7.3 percent to 5.9 percent, while those pursuing some other postsecondary educational program has risen slightly.

Female students are more likely to continue education; 69 percent of female graduates continue compared to 61.3 percent of the males. And while women comprise 52.4 percent of the total number of graduates, 55.4 percent of those continuing their education are women. Even greater disparities are seen between racial minorities and white students. In addition to having lower high school graduation rates than their white counterparts, minority students are also less likely to continue their education. In 1984, while 67.3 percent of white graduates continued on to some form of post-secondary education, the percentage for black graduates was 53 percent and for Hispanic graduates, 44.6 percent.

Over the past decade there has been a significant drop in the number of students who report they are undecided about their degree-level aspirations. Also significant are the 7.0 percentage point increase in those citing a bachelor's degree as the goal and the 3.8 point increase in those aiming at a master's degree. While the percentage with a professional degree as a goal has declined modestly, the composition of that group has changed markedly. Ten years ago, 19 percent of the males and 11 percent of the females reported the goal of a professional degree. The current responses, 13.8 percent of the males and 13.3 percent of the females indicating interest, indicate a new similarity in the aspirations of the sexes.

Career-related activities. As for the previous year, approximately 30 percent of public high school graduates sought to enter the workforce immediately following graduation. Higher percentages of minority students enter career-related activities; while 28.9 percent of white students seek employment upon graduation, 39.1 percent of black students and 44.9 percent of Hispanic students do so. In 1984, among the 10,182 graduates seeking employment, 13.0 percent enter the military. Seventy-four percent of the graduates seeking employment succeeded in finding jobs. The 10.3 percent unemployment rate among public school graduates was 1.4 percentage points higher than the previous year. Among the unemployed, females accounted for 54 percent of the total. Minority graduates experienced higher unemployment rates (19 percent for black graduates and 20 percent for Hispanics compared to 8.4 percent for whites).

In 1984, 61.8 percent of the vocational-technical school graduates entered employment and the majority of the employed, 42.7 percent, was employed full-time in work related to the student's school program of study. The unemployment rate among vocational-technical school graduates, 2.6 percent, was up slightly, 0.7 of a percentage point, over the previous year. Among students who completed vocational education programs in local school districts, 19.3 percent were employed full-time in work related to their studies; their unemployment rate was 7.4 percent. The statewide unemployment rate for all 18-to-20-year-olds was 11.4 percent.



Public High School Graduates in Career-Related Activities

Year of Graduation	Total[1] Graduates	Seeking Careers[2] Number	Percent	Military Number	Percent	Employed Number	Percent	Unemployed Number	Percent
1984	33,686	10,182	30.2	1,324	13.0	7,811	76.7	1,047	10.3
1982	37,706	11,298	30.0	1,538	13.6	8,460	74.9	1,300	11.5
1980	37,683	11,839	31.4	1,299	11.0	9,408	79.5	1,132	9.6
1978	39,914	12,955	32.5	1,362	10.5	9,977	77.0	1,616	12.5
1976	40,612	13,677	33.7	1,585	11.6	9,930	72.6	2,162	15.8
1974	39,340	13,340	33.9	1,138	8.5	10,426	78.2	1,776	13.3

[1] Includes graduates from Norwich Free Academy, Gilbert School and Woodstock Academy; excludes vocational-technical school graduates.

[2] The activity of approximately five percent of the students is unknown.

Note: Percentages are a percent of those seeking careers.

Source: CT Department of Education

Vocational rehabilitation. Disabled people who prepare for a productive and self-sufficient role in the labor market with the assistance of services provided by the State Department of Education's Division of Vocational Rehabilitation (DVR) are certainly among the state's highest achievers. In 1984-1985, approximately 2,500 DVR clients were participating in educational activities including attending public and nonpublic vocational and business schools and postsecondary institutions, studying for college degrees, and receiving on-the-job training (see graph, Section 3, page 34).

PROGRAMS

Instructional programs are the heart of education. A strong tradition of local autonomy in curriculum-related educational policy characterizes American education and is true in Connecticut as well. In recent years, however, concerns about educational equity within the state have shifted some of the initiative from the local to the statewide level. For example, in 1979, the General Assembly passed legislation which, for the first time, delineated program areas which all local school districts must offer in a planned, ongoing and systematic way. In 1984 the high school graduation requirement, initially set at 18 credits in the previous year, was raised to 20 credits, effective in 1988. Earlier, in the late 1960s, both state and federal legislation was passed requiring local school districts to provide special education programs and services, as well as compensatory and bilingual education, for students with special needs. Currently, the Connecticut General Assembly is considering a number of curriculum-related proposals, including the desirability of mandating programs for students who possess special academic ability or talent in the creative arts.

The balance of this section discusses programs for students with special needs and programs with a special purpose as well as instructional programs for all students.

Instructional Programs For All Students

The Connecticut *General Statutes* prescribes minimum requirements governing several aspects of instruction in the state's public schools. Included among the legislative mandates are:

- number of school days—180
- minimum hours of instruction annually—900 hours for grades 1-12 and 450 for nursery school and kindergarten
- minimum graduation requirements—20 credits
- planned ongoing and systematic instruction in the following subject areas:
  - —the arts
  - —career education
  - —consumer education
  - —health and safety
  - —language arts, including reading, writing, grammar, speaking and spelling
  - —mathematics
  - —physical education
  - —science
  - —social studies, including, but not limited to, citizenship, economics, geography, government and history, and,
  - —at the secondary level, one or more foreign languages and vocational education

To meet the mandate for 180 school days each year, school districts in Connecticut provide an average of 951 hours of instruction annually for elementary school children, 947 hours in middle or junior high school and 943 hours per year in high school. The length of the school day at all levels ranges from five to nearly six hours. Half-day kindergarten programs run from two to four hours while in extended-day kindergartens the sessions range from three-and-one-quarter hours to five-and-three-quarter hours each day.

Graduation Requirements

In 1983, the General Assembly set a statewide standard for a high school diploma, requiring the completion of at least 18 credits. A credit is defined in the law as "the equivalent of a forty-minute class period for each day of a school year." The requirement was set to begin with the graduating class of 1987. An amendment in the following year raised the minimum to 20 credits, beginning for students graduating in 1988. The legislation also specified the number of credits that must be taken in six subject areas: English—4; mathematics—3; social studies—3; science—2; art or vocational education—1; and physical education—1.

In the fall of 1984 the State Department of Education surveyed all public high schools in the state to determine their current graduation requirements and the actual course-taking behavior of Connecticut graduates. Survey forms were returned by 134 of the state's 137 comprehensive high schools and by the E.O. Smith High School, three endowed incorporated academies and 17 vocational-technical schools.

Data related to students graduating in the class of 1984. Most students in Connecticut's comprehensive high schools took more course work in the major subject areas than required by their schools. With the exception of English and physical education, a majority of students took at least one credit hour more than required in each of the major subject areas. Almost all students were already taking four or more credits in English and a substantial number were already meeting the one hour credit requirement for physical education.

Subject Area Graduation Credit Requirements:
(Number: 138 High Schools)

Subject Area	1988 State Requirements	1984 Percent of Schools At or Above 1988 Requirement	1984 Seniors Taking Requirement or More
English	4	98.6	99.6
Mathematics	3	2.9	70.3
Social Studies	3	29.0	66.4
Science	2	57.9	88.9
*Art	1*	3.6	46.4
*Vocational Education	1*	2.1	71.1
Physical Education	1	83.3	87.4

* Section 10-221a C.G.S. requires one credit in art or vocational education.

Note: Although there is no state or local requirement for foreign language, 50.2 percent of 1984 seniors took two or more years of foreign language and 61.1 percent took at least one course.

Source: CT Department of Education.

The total number of credits required for graduation ranged from 16.5 to 26.25. Six schools required fewer than 18 credit hours for graduation and 24 schools required more than 20 credit hours. Forty-five percent of the comprehensive high schools in 1984 met or exceeded the requirements for graduation that will become effective statewide for the class of 1988. The vocational-technical schools required 31 credits for graduation.

Advisory panel. In 1984-1985 an Advisory Panel on Graduation and Course Requirements was charged by the State Board of Education to review mandated course offerings, high school graduation requirements and the merits of an "exit test" for public high school graduation as well as differentiated diplomas. The group determined that an "exit test" does not appear to offer effective motivation to improve teaching and learning and, also, that a statewide award based on highly selective criteria would be more effective in recognition of outstanding achievement than a differentiated high school diploma. Similarly, the group recommended that, rather than adding additional credit requirements for high school graduation, the State Board of Education should convene a broadly representative panel to identify a "common core of learning" that Connecticut high school graduates could reasonably be expected to achieve. In response, the board has established an Advisory Committee on the Development of a Common Core of Learning for High School Graduates which is expected to report in the fall of 1986.

The advisory panel also considered the current legislation which outlines the courses of study all local school districts must offer. They reported that the current legislation could be strengthened by specifying more detailed course components, by delineating specific requirements for different grade levels and by adding computer and library media education. Although legislation reflecting these findings was not enacted, an amendment which did pass allows that, at the discretion of the local board of education, a student may apply a course taken in the seventh or eighth grade, which is equivalent to a course given in grades 9-12, toward high school graduation requirements. The students must still earn 20 credits at the high school level.

Technical assistance. The State Department of Education is charged with assisting local school districts to plan, implement and evaluate curriculums which include the courses outlined in the *General Statutes*. Primary responsibility for providing curriculum-related assistance rests with the department's Division of Curriculum and Professional Development. Specialists in the subject areas of art, foreign language, mathematics, physical education, science and social studies consult with individual school districts, hold meetings, conferences and workshops, and furnish materials on curriculum development. Beginning in 1986, the department plans to update its series of guides to curriculum development, a major resource of information about teaching and learning in the mandated subject area. Districts can use the guides in developing and evaluating their programs.

Also in 1986, the department will report on the first part of a comprehensive survey of curriculum practices in the state's public schools. The data collected through this survey, which will be useful to both local school districts and the State Department of Education, is expected to contribute significantly to efforts to assure equity and excellence in the schools.

The department also provides assistance concerning the school library media and instructional technology resources which enrich instructional programs in local schools. In today's schools the library media center is a valuable source of a wide variety of materials, equipment and instruction to enhance teaching and learning.

For example, State Department of Education staff also evaluate and select instructional television (ITV) programs, covering a wide range of course offerings for every grade level, to be broadcast during each school day over Connecticut Public Television.

As noted in *A Guide To Computers in Education*, "Connecticut's schools have enthusiastically accepted the challenge to adopt computers for educational purposes." Every high school in the state now uses compu-

ters for instructional purposes and their use in elementary, middle and junior high schools will soon be common practice. A computer guide, published in 1985, focuses on how computers can be used in the classroom—both as a subject for study and as a tool for teaching and learning in other subject areas. Because the effectiveness of computer-assisted instruction depends on the quality of software, the State Department of Education provides information about hardware, software and other computer-related materials through several national computer information service centers.

On the 1983-1984 Connecticut Assessment of Educational Progress in English Language Arts, students were asked, "How much time do you spend doing all of your homework assignments on a typical school day?" A majority of the sample of eighth grade and eleventh grade students, 54 percent, reported spending an hour or less doing homework on a typical school day. The average amount of time per day for students at both grade levels was 1.1 hour. Further analysis of the sample indicated that there was a positive relationship between the amount of time students report spending on homework and their performance on the reading portion of the test. The more time reported spent on homework, up to three hours, the higher the test scores. (The relationship between reporting more than three hours and test scores is a negative one.)

Time Spent on Homework on a Typical School Day

	Grade 8* (N=4, 432)	Grade 11 (N=4, 057)
Hours	Percent of Students Responding	
less than 1/2	14	21
1/2 - 1	40	33
1 - 2	35	35
2 - 3	8	10
more than 3	1	1

* Total less than 100 due to rounding

Source: CT Department of Education

Preschool and Kindergarten

Although five is the minimum age at which children can enter the public school kindergarten programs required in all districts, recent understanding of the importance of the early childhood years, and also the child-care needs of working parents, have spurred efforts to increase opportunities for early childhood education. School districts are mandated (*General Statutes*, Section 10-76d) to provide special education services to children "who have not attained school age, but whose educational potential will be irreparably diminished without special education at an early age."

Prekindergarten enrollment in Connecticut's public schools peaked at 4,390 in 1979 and currently stands at 3,190. Most of these students are enrolled in the state's largest cities. Forty-one percent belong to minority populations, nearly double the percentage of minority enrollments in public kindergartens. In 1985 there were 1,110 State Health Department approved day-care facilities in the state, 51 more than in the previous year and 260 more than five years ago.

According to the report to the State Board of Education by the Committee on Four-Year-Olds, Their Families and the Public Schools, Connecticut parallels the nation in the increase in the number of employed mothers with school-aged children. In 1980, an estimated 41 percent of women with children under age six—compared to 27 percent a decade earlier—were in the labor force. The number of families with only one parent present is also increasing. In 1980, 17 percent of Connecticut's families were headed by women, an increase of 70 percent over 1970, and these families averaged only 46 percent of the income of married-couple families ($11,624 versus $25,103). Other significant committee findings:

- The availability of preschool programs varies widely throughout the state, with estimates of services available in the state's 169 cities and towns ranging from zero to 238 "slots" (i.e., places in all state recognized programs) per 100 children.
- Further analysis of program availability indicated significant differences among counties, with Hartford and Fairfield having the most services, and, except for the state's five largest cities, lower per capita income communities have fewer services available.
- Two state agencies, the Department of Education and the Department of Human Resources, have programmatic responsibilities for preschool children, but a total of six state agencies play different roles in services for preschool children.

Enrollment in Prekindergarten Programs

Program	Number of Children	Percent of Children Enrolled
Day Care Centers [1,6] and Group Day Care Homes [2]		
Nonpublic	34,838	59
Public		
State Funded [3]	4,300	7
Federally Funded [4]	4,000	7
Family Day Care Homes [6]	10,250	18
Nonpublic School	2,406	4
Public School [5]	3,190*	5
TOTAL	58,984*	100

[1] Serves 12 or more children
[2] Serves 7-12 children
[3] Funded by Department of Human Resources
[4] Operated by community action agencies
[5] Multiple funding sources including federally funded Head Start
[6] Licensed
* Updated

Source: Report of the Committee on Four-Year-Olds, Their Families and the Public Schools based on 1983 data.

Based on committee recommendations, the State Board of Education authorized reorganization of the committee to continue work on this issue. The group will focus on developing plans and providing technical assistance for training early childhood education personnel and developing an incentive grant program to encourage local school districts to establish or expand prekindergarten programs. Because these programs have proved beneficial to children who are educationally at risk, the State Board of Education's 1986-1987 budget request includes $900,000 for a new incentive grant program to develop demonstration models of delivering services to four-year-olds and encouraging early home-school linkage.

Kindergarten. The number of extended-day kindergarten programs in Connecticut continues to increase. In 1984-1985, 17 school districts offered extended-day or full-day kindergarten programs. In nine of those districts, every elementary school in the district offered such a program; in the other eight districts, the extended-day programs (from four hours up to a full school day) were offered in one or more of the elementary schools in a pilot or gradual implementation phase-in process. All these programs were open to all kindergarten-eligible children, i.e., those who would be five years old by the following January. [There are a few extended-day kindergarten programs which are offered only to children with special needs, such as developmental delays, bilingual, etc. These are not represented in the count of programs offered in the 17 districts.]

In 1985-1986, an additional six districts will provide extended-day kindergarten programs and at least five more will offer such programs in 1986-1987. A state incentive grant, such as that requested in the State Board of Education 1986-1987 budget, would generate more programs. The proposed grant program would run for five years and would reimburse local school districts for personnel costs, equipment and rental space, necessary to expand existing extended-day programs or to start new ones.

Professional Development

The State Board of Education has made a major commitment to improve the quality of teaching in Connecticut. The first step toward reaching this goal is to attract superior students to teaching, in part by raising teacher salaries, and also to ensure the competence of new teachers. (These issues are discussed in greater detail in Section 1.)

To maintain and improve the quality of the current teaching and administrative force, the State Department of Education has significantly expanded assistance with in-service training to local school districts. Local school districts are required (*General Statutes*, Section 10-220a) to provide "ongoing and systematic professional development" to be outlined in five-year plans approved by the State Board of Education.

The department offers assistance with professional development programs and with activities related to improving specific grade level and subject area teaching. A major vehicle for providing such targeted professional development is the Institute for Teaching and Learning. This program began in the summer of 1984 when, with a budget of $500,000, the State Department of Education offered 24 twenty-hour summer courses in a variety of areas and 3,000 teachers applied for 600 available spaces. The success of the initial program prompted a budget request to expand the program for the school year 1985-1986. An appropriation for fiscal year 1985-1986 of $1.53 million enabled the department to increase the number of summer sessions to over 80 which allowed more than 1,800 to register. The program has also been expanded to include a series of conferences and workshops held throughout the year. These events will bring together education researchers and practitioners to explore significant and timely issues including early childhood, adolescence, reading, testing and thinking skills.

Celebration of Excellence, another new program to foster professional development, is an innovative approach to rewarding outstanding teachers and disseminating information about creative classroom projects. The program, administered cooperatively by the State Department of Education and the six regional educational service centers, with support from the Southern New England Telephone Company, will invite all of Connecticut's classroom teachers to submit curriculum projects which they have developed and used successfully in their classrooms. A panel of educators will select a maximum of 125 entries for special recognition; teachers will receive a cash award and the curriculum projects will be published and widely disseminated among the state's schools. Twelve projects will be selected for videotaping and dissemination.

Vocational Education

Vocational education affords an important and rewarding educational option for many Connecticut students. While many students elect to pursue a vocational education program that will lead to immediate employment following high school graduation, some seek to continue education and training in postsecondary institutions, and others take only a limited number of vocational courses to acquire specific skills for personal enrichment. In Connecticut vocational education is provided in local schools, in comprehensive high schools and in the state-operated Regional Vocational-Technical School System.

In proportions reflecting overall enrollment decline, total enrollment in vocational education has declined in recent years; the number of all students enrolled in one or more courses in all institutions offering vocational education declined from 226,342 in 1980-1981 to 198,247 in 1984-1985. The greatest decline has been in enrollment in the local school districts.

Vocational education in the local schools. Vocational education in the local schools, usually beginning in the seventh grade, provides opportunities for students to acquire, improve and expand skills and knowledge needed to enter, and advance, in a wide variety of careers which make a positive contribution to the state's

economy. Connecticut's public schools provide every student with the opportunity to participate in programs covering a spectrum from seventh grade basic and introductory home economics and industrial arts to twelfth grade courses designed to prepare students for entry-level employment or further education.

While no state grant program is directed to vocational education in the local schools, since 1983 a special grant program has reimbursed local and regional school districts and regional educational service centers for 40 to 80 percent of the eligible cost of several categories of equipment used in vocational education programs. State funding for this program is obtained through bonds. For 1984-1985, the total grant monies available totaled $1,281,000. The majority of purchases under this program continue to be for industrial arts and business and office education programs, with advanced computerized machines and photocomposing machines and word processors being typical acquisitions.

Vocational-technical schools. Connecticut's Regional Vocational-Technical School Sytem is celebrating 75 years of service to the state. Throughout these years the mission of the system has been to provide occupationally specific training and rigorous academic instruction to Connecticut's youth and adults.

Upon successful completion of the four-year daytime program in one of more than 40 trades, a student meets all the state-mandated graduation requirements and in some programs will have received up to 2,000 hours of apprenticeship credit toward a journeyman's certificate in a trade.

Students enrolled in local high schools are able to take advantage of vocational-technical school programs and facilities through satellite and shared-time programs. They receive academic instruction in their local high school and vocational training at either a satellite facility or one of the vocational-technical schools. The vocational-technical schools also provide adults with educational opportunities. Cooperative programs serve apprentices, unemployed workers and other adults who need training to qualify for employment. The vocational-technical school system also seeks to serve other groups with special needs. Programs which have been added or expanded to increase the enrollment of populations which have not traditionally taken advantage of the vocational-technical schools include mathematics labs, bilingual education for youth and adults, the PRO-TECH program for gifted and talented students and a pilot program in the arts and service occupations for handicapped students.

Changes in the economy and labor market and rapidly changing technology have stimulated corresponding changes in vocational-technical school

Vocational Enrollment by Program Area
1984-85

Occupational Programs	Local Education Agencies Grade 7-12	Vocational-Technical Schools*	Community Colleges/ State Technical Colleges	Other Agencies	Total
Agriculture	1,557	0	62	43	1,662
Business and Office	36,421	131	7,599	293	44,444
CWE/Diversified Occupations	2,671	0	0	78	2,749
Health	886	710	2,122	62	3,780
Marketing and Distribution	3,182	0	530	0	3,712
Occupational Home Economics	1,090	850	664	118	2,722
Technical, Trade and Industrial	2,479	14,281	1,785	2,318	20,863
Subtotal	48,286	15,972	12,762	2,912	79,932
Nonoccupational Programs					
Consumer Home Economics	70,457	0	0	90	70,547
Industrial Arts	39,297	0	0	349	39,646
RVTS Exploratory	0	3,648	0	0	3,648
Other	3,471	31	0	972	4,474
Subtotal	113,225	3,679	0	1,411	118,315
TOTAL**	161,511	19,651	12,762	4,323	198,247

* Includes all programs: secondary full-time day, satellite, shared-time, short-term and long-term adults and apprentice

** Students enrolled in both an occupational program area and in either consumer home economics or industrial arts are counted in both programs

Source: CT Department of Education

programs. Based on recommendations of industry craft committees for each trade and the advice of school steering committees, new or revised curriculums have been developed in many trade areas. State-of-the-art equipment is in place so that students will be prepared for employment in high technology fields using computer-controlled machines and computer-assisted design. Changes also necessitate ensuring the upgrading of skills and training of vocational-technical school instructors and administrators. Toward that end, the system is implementing an expanded professional development program which emphasizes new technology and new techniques for effective instruction.

A goal of vocational educators is to decrease sex stereotyping in vocational education by increasing the percentage of male and female students completing nontraditional vocational programs. A vocational program that is nontraditional for one sex was defined in 1981, as one in which at least 80 percent of the participants were of the opposite sex. In recent years there has been measurable progress toward reversing sex stereotyping. Since 1980, the percentage of female students completing traditionally male programs has increased from 1.9 to 4.8 percent. Similarly, while in 1980 males comprised 15.9 percent of the students completing traditionally female programs, by 1984 the percentage of male graduates of these programs was 21.4 percent.

Adult Education

A century ago, the Connecticut legislature passed the state's first law relating to education for adults. It established evening schools to educate people over the age of 14 in basic skills and provided for state support for these programs. Since then payments to the local school districts have increased substantially and programs have been expanded to include high school completion, Americanization and English as a second language. Today, persons over the age of 16 who are not enrolled in a regular school program are eligible for adult education. Another change has been the involvement of the federal government which now assists in the support of adult education.

Basic skills programs for adults, while not offered by every school district, are accessible to residents of all regions of the state. During the past five years, approximately 77 local school districts and other community-based organizations have provided adult education basic skills programs to an estimated 185,000 individuals. In response to the changing needs of this population, programs have also changed and grown. For example, basic skills education activities by community-based organizations, such as literacy volunteers, have increased greatly. Other innovative programs to increase accessibility to adult education include a home study program to prepare for the General Educational Development (GED) diploma. Also, four regional programs give persons living in smaller communities access to comprehensive programs offered in larger communities.

Nontraditional Vocational Program Completers

Traditionally Female Programs	Percent of Males Completing 1980	1984
Child Care	1.3	1.2
Clothing Management	4.8	2.2
Cosmetology	1.2	9.3
Fashion Design	0.0	0.0
General Office	22.1	25.6
Nursing Assistant	5.6	6.7
Secretarial	2.5	2.8

Traditionally Male Programs	Percent of Females Completing 1980	1984
Agricultural Mechanics	26.1	9.1
Air Conditioning	0.0	4.8
Appliance Repair	0.0	5.8
Automobile Trades	2.0	4.9
Construction Trades	1.4	3.5
Electronics/Industrial Electronics	2.7	9.6
Forestry	25.0	0.0
Machine Tool/Shop	0.1	3.3
Natural Resource Renewal	10.5	21.1
Small Machine Repair	1.3	11.1
Welding/Sheet Metal	0.0	4.7

The term "nontraditional" to describe programs or students is losing some of its original significance. "Nontraditional" students are those who enroll in programs traditionally taken only by the opposite sex, e.g., women enrolling in machine repair or men enrolling in secretarial and office programs. As the above table shows, more than 20 percent of the general office program completers in both 1980 and 1984 were male, while more than ten percent of the completers of small machine repair in 1984 were women.

Source: CT Department of Education

A Staff Development Center in Farmington provides in-service workshops and other professional development activities for adult education professionals. The State Department of Education has also focused more attention on activities to provide local districts and other agencies with up-to-date information about exemplary practices and model programs, current issues and concerns in adult education, and new directions for adult education in the state.

In May 1985 the State Board of Education adopted the report of the Adult Education Study Committee. According to the report, *Looking To the 21st Century: A Strategic Plan for Adult Education*, only a small proportion of the state's educationally disadvantaged adults is participating in adult education programs. To address this concern, the committee suggested that priorities for adult education should be: (1) to reduce illiteracy (2) to educate the structurally unemployed and (3) to improve the quality of life for undereducated adult populations.

Programs for Students With Special Needs

Exceptional students may require programs and services different from those offered for the general school population. Some of them may be learning disabled, emotionally disturbed, speech impaired or mentally retarded while others have vision, hearing, orthopedic or neurological impairments or other physical disabilities which impede their ability to learn without supportive programs and services. The proportion of these students identified by Connecticut's public schools increased from 10.02 percent of all students in 1977-1978 to 13.68 percent in 1984-1985. When other categories of exceptionality, such as gifted and talented students and pregnant students are counted, exceptional students comprise 16 percent of total school enrollment.

Special Education Students

	Percent of All Students	
Primary Impairment	1980-81	1984-85
Hearing Impairment	0.18	0.18
Learning Disabled	5.16	6.07
Mentally Retarded	1.28	1.07
Neurological Impairment	0.12	0.13
Orthopedic Impairment	0.10	0.07
Social/Emotional Maladjustment	2.19	2.72
Speech Impairment	2.73	2.64
Vision Impairment	0.06	0.10
Other Health Impairment	0.07	0.06
Other	-	0.20
Uncategorized	0.20	0.44
TOTAL	12.09	13.68

Source: CT Department of Education

Special Education. The educational needs of the majority of the state's special education students are met in the regular public schools and whenever possible they are mainstreamed in regular classes. Some students, however, do require programs and services which can only be provided at special education facilities.

Because of its demonstrated benefits to students, early intervention with children who have, or may develop, disabilities is a major thrust in special education today. This issue was the focus of the Committee To Study Whether Services To Handicapped Infants and Toddlers Should Be Mandated. The report of this group confirmed the successful outcomes of early intervention and called attention to weaknesses in the provision of services for this population. At present, at least eight public and private agencies provide services to handicapped children under the age of four. Because local school districts are required to offer services only to children who reach age three by January 1 of the school year, not all children who need services may receive them.

As a result of the work of the Committee To Study Whether Services To Handicapped Infants and Toddlers Should Be Mandated, the State Board of Education appointed a 35-member Birth-To-Three Interagency Committee (including representatives of all state agencies which provide services to young children) to develop and plan for an interagency mandate to provide services to handicapped and at-risk children and their families. The board has also requested $500,000 in its 1986-1987 budget for a new competitive grant program which would provide funds to public and private agencies to establish programs and services for families with infants and toddlers who are severely handicapped or at risk of developing handicaps.

Gifted and talented. Over the past decade programs for academically gifted students or those talented in the creative arts have increased significantly. While ten years ago only 40 school districts offered at least one program for gifted and talented students, in 1984-1985 the number was 139, or 84.2 percent of all districts. At present, most programs are for students at the elementary and middle/junior high school levels; fewer than one-quarter of the state's high schools offer such programs. Fourteen districts sponsor comprehensive programs for the intellectually gifted. No district, however, offers a comprehensive, K-12 program to serve both the intellectually and artistically talented. In 1984-1985, nearly 2,000 more students than the previous year participated in these programs, bringing the statewide total to over 13,000. Although school districts are not required to offer programs for gifted and talented students, additional funding is available for districts which do offer them. Last year the State Board of Education supported a legislative proposal to mandate programs for the gifted and talented, but after a favorable committee report the bill was defeated in the state Senate. The matter will be up for legislative consideration again in the next session.

Number of Districts[1] With Gifted and Talented Programs

Fall of School Year	Elementary	Middle/ Jr. High	High School	Districts With at Least One Program
1984	137	80	32	139
1983	127	76	29	135
1982	121	72	27	133
1981	114	68	26	127
1980	109	63	24	122
1979	91	48	19	105
1978	77	42	20	92
1977	57	33	18	71
1976	46	28	12	62
1975	37	23	10	47
1974	30	19	9	40
1973	24	14	7	31

[1] Of the state's 165 school districts, 158 have elementary schools, 125 have middle/junior high schools and 117 have high schools.

Source: CT Department of Education

The State Department of Education also continues to encourage regional programming to meet the needs of all gifted and talented students. During 1984-1985, the department assisted the six regional educational service centers to develop seven additional regional programs. Providing professional development activities focusing on teaching the gifted and talented is another means to promote these programs. The State Department of Education is providing assistance to a large number of school districts and course work in this area is being offered at Southern and Western Connecticut State Universities.

Pregnant Teenagers. The problem of providing education for pregnant teenagers in Connecticut's schools had not been solved. In fact, as the number of teenage mothers increases, the scope of the problem increases. According to the Department of Health Services, 4,077 teenagers gave birth in 1983; 99 of them were under 15 years of age. Also in 1983, the Connecticut Task Force on Education to Prevent Teenage Pregnancy reported that one of every ten babies in the state was born to a teenage mother.

Providing education for teenage parents who often must provide for their children while still trying to complete their education entails numerous, complex issues. In addition, the children of young parents are at high risk of developing health disorders, developmental difficulties, and, ultimately, educational problems. Legislation, effective July 1, 1985, authorized the Department of Education to award ten grants per year to provide one-half the total cost of special programs for young parents. Among the support services to be provided are professional counseling and child care.

With the $100,000 funding available in 1985-1986, the department expected to serve approximately 250 parents. To encourage more local districts to address the need to educate young parents, the State Board of Education in its 1986-1987 budget request increased funding for the Young Parents Program so that districts can establish or maintain day-care services for teenage parents.

Compensatory education. Compensatory education programs supported through Chapter 1 of the federal Education Consolidation and Improvement Act, together with the state's Education Evaluation and Remedial Assistance Act, provide local school districts with funding to meet the needs of educationally disadvantaged students. In 1984-1985 state and federal funding for grants to local school districts totaled $45 million.

In local school districts, compensatory education funds are used primarily to support supplementary programs in remedial mathematics, reading and language arts. Enrollment in these programs depends on the number of children needing the services and also on the availability of funding. Following a period of growth, enrollment in compensatory programs declined significantly in the years between 1981 and 1983 because of cutbacks in federal funding. In 1984-1985, 55,405 students were served in compensatory programs, marking the second year of growth since the period of decline just noted. The number of students needing assistance exceeds the number that can be helped at the current level of funding.

Enrollment in Compensatory Education Programs

	Public		Nonpublic		Total	
Year	Number	% of Public Students	Number	% of Nonpublic Students	Number	% of Combined Enrollment
1984-85	51,860	11.1	3,545	4.5	55,405	10.1
1983-84	48,399	10.2	2,560	3.2	50,999	9.2
1982-83	41,457	8.4	2,464	3.0	43,921	7.7
1981-82	43,694	8.5	2,848	3.2	46,542	7.8
1980-81	55,730	10.4	3,960	4.6	59,690	9.6
1979-80	55,526	10.0	4,643	5.4	60,169	9.4
1978-79	54,938	9.5	4,257	5.0	59,195	8.9
1977-78	51,563	8.5	3,893	4.5	55,456	8.0
1976-77	47,608	7.6	3,774	4.3	51,382	7.2
1975-76	47,261	7.4	3,865	4.4	51,126	7.0
1974-75	46,341	7.1	4,583	5.2	50,924	6.9

Source: CT Department of Education

Children who are institutionalized for neglect or delinquency, and others such as the children of migratory workers, often fail to achieve much academic success in school. These children also receive Chapter 1 services. In addition, approximately $1.2 million, an increase over the $800,000 for 1983-1984, went to state correctional institutions serving 1,078 young adults under age 21.

Vocational Rehabilitation

The mission of the State Board of Education's Division of Vocational Rehabilitation (DVR) is to assist disabled individuals to prepare for productive work in the labor market and, to the greatest degree possible, for self-sufficiency in their personal lives. Services for clients include medical and vocational evaluation, vocational counseling, and training for physical and/or mental restoration. In 1984-1985 the division served approximately 16,000 individuals. A total of 2,266 individuals, 57 percent of them classified as severely disabled, were rehabilitated. Of this number, an estimated 83 percent entered competitive employment. As in recent years, the largest number, approximately 40 percent, obtained employment in clerical, sales and service occupations; professional and technical occupations and machine trade occupations each employed approximately 17 percent. Sheltered employment was the placement for some 15 percent of those rehabilitated and about five percent became homemakers, unpaid family workers or were self-employed.

Over the past five years, the number of referrals made to the Division of Vocational Rehabilitation has

remained relatively stable. The 7,040 referrals made in 1984-1985 was a slight decline, three percent, over the previous year and the number of new clients accepted also declined, by eight percent. The dip in the caseload in 1982 resulted from the change in the federal reimbursement system from advance funding to a case-by-case method.

DVR is placing increased emphasis on assisting clients to successfully make the transition from the period of rehabilitation and training to the world of work, particularly competitive employment, and independent living. To this end, during the past year, the division distributed $268,000 in grants to eight private, nonprofit rehabilitation facilities which used the funding to develop transitional employment sites in business and industry for severely disabled individuals. Also, a Job Seeking Skills program to assist clients find employment was established in each of the five DVR district offices. To provide living assistance services for severely disabled people, two grants totaling $91,000 were awarded to the Hartford and Bridgeport Centers of Independent Living.

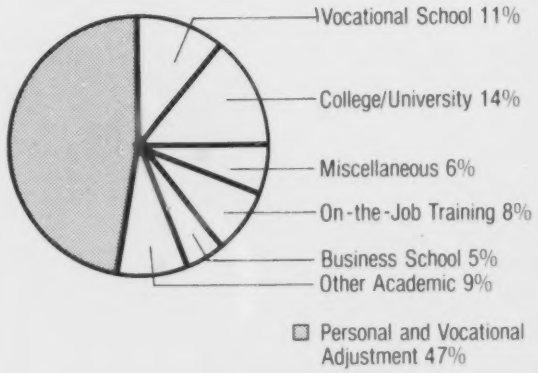
Cooperative agreement concerning services to persons with handicaps. In 1984-1985 the State Department of Education reviewed and revised a formal agreement among department divisions designed to enhance services provided to handicapped individuals. The new "Cooperative Agreement Concerning Services to Persons with Handicaps" involves the Divisions of Curriculum and Professional Development, Educational Support Services, Vocational Rehabilitation, and Vocational, Technical and Adult Education. The primary goals of the agreement are to assist local, regional and unified school districts and the regional vocational-technical school system:

- to develop and implement vocational programs and services to serve individuals with handicaps, and
- to assure that eligible individuals with handicaps receive the programs and services, including transitional services, to which they are entitled by law.

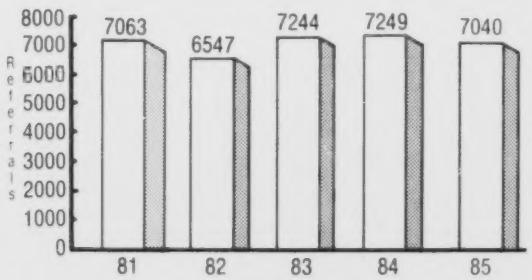
The department hopes to encourage the development, at the local level, of similar agreements by school districts, regional educational service centers and other service providers. To help achieve this goal, the Cooperative Agreement will be included in a resource manual developed as part of the department's project on "Planning and Developing Cooperative Transitional Services for the Handicapped in Connecticut." The manual will be distributed statewide for use by local and regional school districts, vocational-technical schools, regional educational service centers, vocational rehabilitation field staff, parents, employers and others who provide services to persons with disabilities.

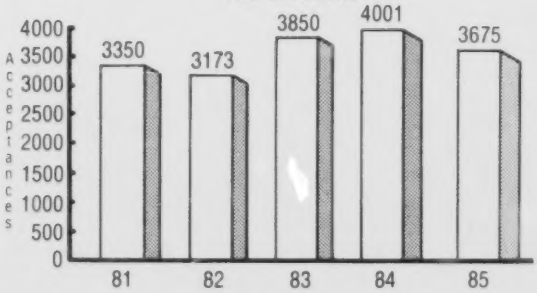
Education Services for Clients of the Division of Vocational Rehabilitation

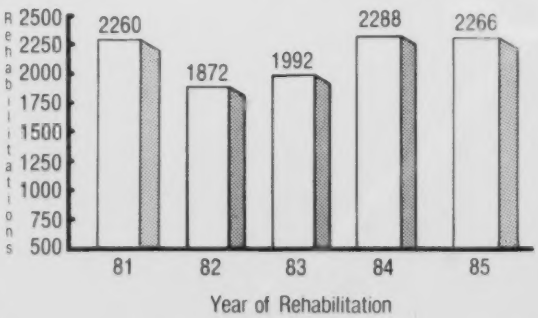
Total Number: 2,483



Number of Clients Referred to, Accepted and Rehabilitated by the Division of Vocational Rehabilitation 1981-1985







Source: CT Department of Education

Programs With A Special Purpose

The State Department of Education operates a number of programs which focus on specific educational concerns. The purpose of all of these programs is to enhance educational opportunities for students. Some, such as the School Effectiveness Project, offer special services to improve education for all students while others are directed toward particular problems.

School Effectiveness. The School Effectiveness and Secondary School Development Projects assist individual schools to develop and implement school improvement action plans which are based on recent research findings concerning school and classroom effectiveness. The projects offer participating schools a three-year commitment and a state facilitator who guides the school through a process of assessment, planning, implementing and evaluation. During 1984-1985, 37 schools—six high schools, six middle schools and 25 elementary schools—participated in these projects. The services included orientation, assessment and planning activities in 18 schools participating for the first time, intensive follow-up support in ten schools participating for the second year, and second-cycle assessment, planning and evaluation activities in nine schools in the program for the third year. It is anticipated that ten to 15 new schools will be added to this program in 1985-1986.

Priority school districts. According to a University of Connecticut report on the annual evaluation for the first year of operation of the Priority School District Program, "the long-term benefits. . .will have a positive impact on the quality of education in the participating districts for many years." This new program has won praise from participants and observers alike.

School year 1984-1985 was the first year of operation of the Priority School District program, a legislatively mandated three-year pilot program designed to assist school districts with the greatest demonstrated need to improve student achievement and enhance educational opportunity. The State Department of Education determines eligible school districts based, in part, on student achievement on statewide tests. The program provides grants and special priority technical assistance from State Department of Education staff. Participating districts, a total of ten in 1984-1985, were selected on the basis of three-year action plans submitted voluntarily by districts. Distribution of available grant funds was based on student enrollment and relative wealth of the town. The legislation requires that 30 percent of the grants go to districts serving a population of less than 50,000.

The first ten priority school districts were: Bridgeport, Eastford, Hartford, Killingly, Middletown, New Britain, New Haven, Stamford, Waterbury and Windham. The following samples of activities included in the local action plans indicate how the districts used the program to supplement new and existing programs to improve student achievement.

- Eastford developed a new scope and sequence for the mathematics curriculum, developed a computer education curriculum and provided in-service staff training in electronic instructional techniques.
- Hartford developed an Oral Language Acquisition Program for grades 1 and 2.
- New Haven developed a new kindergarten curriculum, a system-wide program of after-school remedial and enrichment programs and structured orientation sessions for all parents and grade 7-12 students.
- Stamford provided coaching sessions to improve instructional leadership and school effectiveness for elementary and secondary school administrators and provided training sessions for all building and district administrators.
- Windham revised curriculum guides for language arts, reading and study skills (K-12) and mathematics (K-8) and updated the district-wide testing program to achieve better alignment between testing and curriculum development activities.

In addition to the grants and assistance with local action plans, the State Department of Education also provided a wide range of extra services to the priority school districts. Every unit of the department was involved in providing these resources, demonstrating the department's commitment to these districts. Extra efforts were made to offer technical assistance, including professional development and curriculum programs, and to give priority in the award of discretionary grants.

Chapter 2 Education Block Grant Program. In 1981 Chapter 2 of the federal Education Consolidation and Improvement Act (P.L. 97-35) combined 28 formerly separate categorical federal aid programs into one block grant. Chapter 2 is divided into three subchapters which reflect the programs merged in the consolidation: Subchapter A concerns basic skills instruction; Subchapter B covers improvement and support services (including textbooks, instructional materials and equipment; guidance counseling and testing; staff and management development, and voluntary desegregation), and Subchapter C concerns special projects (such as metric education, arts in education, consumer, health and environmental education, the gifted and talented, community and career education).

During fiscal year 1984-1985, the third year of the Chapter 2 operation, Connecticut received $5,488,351. From this block grant, at the recommendation of the Governor's Advisory Committee, the State Department of Education made entitlement grants totaling $4,673,295 to local school districts. A school district may use its Chapter 2 grant for any of the purposes outlined in the federal legislation. Nonpublic school students attending school within a district's boundaries are eligible for Chapter 2 services and nonpublic schools are afforded the same program choices available to the public schools. Additional grants awarded under this program were (1) regional educational service centers, (2) desegregation grants and (3) competitive grants.

Child nutrition programs. Through several federal child nutrition programs—including the National School Lunch, Special Milk, School Breakfast and Summer School Food Service—the State Department of Education assists both public and nonpublic schools with operating food service programs, developing nutrition education programs and training food service managers. Schools participating in the largest program, the School Lunch Program, are reimbursed for all lunches served and also receive government food commodities. In 1984-1985 every school day an average of 206,540 students were served lunches in participating schools. Charges to students vary depending on their families' ability to pay. Even with subsidies, however, student payments furnish 90 percent of these programs' operating revenues. The Summer Food Service program provides breakfast and lunch for low-income family children; during 1984-1985 at 245 locations around the state, an average of 19,791 meals were served each day during July and August. A program which increased significantly—with an average of 3,000 more children in 1984-1985—was the Child Care program which reimburses public and private day-care centers and family day-care homes for meals and snacks.

The overall decline in numbers of students receiving free or reduced price meals and the corresponding increase in paid lunches (see Table on Participation in Child Nutrition Programs) corresponds to a national decline in participation in school lunch programs. From 1980 to 1983, the average decline in participation nationally was 13.58 percent. Connecticut's percent of decline in the number of public and private school pupils' participation in the National School Lunch Program, as reported in Statistical Abstract of the United States, was 30.56 percent, more than double the national decline. The drops in participation parallel the decline in federal support.

Equity programs. A program for national origin desegregation helps local school districts to identify and provide services for limited English-proficient (LEP) students. Training and technical assistance in bilingual education and teaching English as a second language are provided for bilingual teachers and administrators in local school districts by State Department of Education staff. Sex equity programs seek to alleviate discrimination and sex stereotyping in education. Department consultants provide conferences, training sessions and publications to heighten awareness of bias and sex stereotyping and to suggest ways of eliminating its negative consequences. For example, during 1984-1985, the department published a series of pamphlets covering equal opportunity, mathematics and science, sexual harassment, careers and Title IX (the federal legislation which prohibits discrimination based on sex). Coordinators of intergroup relations were named in 80 Connecticut school districts.

Racial balance/integration education. Connecticut law mandates that the State Board of Education assure racial balance in the state's public schools. Regulations require that each school in a district reflect—within a range of 25 percent—the racial composition in the district as a whole. When imbalanced districts are identified, the State Board of Education requires the district to submit plans to correct the imbalance.

During 1984-1985 the department monitored progress of large city school systems in achieving racial balance. By October 1985, two districts were brought into compliance and another district was developing a plan to comply.

During the past year, an advisory committee completed its review of racial imbalance and quality education in Connecticut. Data considered by the group led to the conclusion that "there is a strong inverse relationship between racial imbalance and quality education in Connecticut's public schools," principally because racial imbalance "is coincident with poverty, limited resources, low academic achievement and a high incidence of students with special needs." Demographic data reviewed by the committee showed that most of the state's minority students are found in poor urban areas and in a few districts contiguous to these areas. Trends suggest that these conditions will intensify rather than diminish in the years ahead. For this reason, the group noted that, because of the racial composition of Bridge-

Participation in Child Nutrition Programs

Average Daily Number of Students

	Lunch				Breakfast			Milk	
Fiscal Year	Paid	Reduced Price	Free	Total	Paid	Reduced Price	Free	Paid	Free
1984-85	128,403	13,319	70,725	212,447	661	102	7,792	23,732	2,228
1983-84	119,350	13,313	75,221	207,884	696	90	8,027	25,323	2,745
1982-83	117,706	13,817	74,645	206,168	649	86	6,836	26,243	2,555
1981-82	110,548	15,388	75,991	203,420	647	116	5,161	26,824	2,848
1980-81	110,398	16,871	71,775	199,044	795	133	4,937	29,791	3,319
1979-80	151,741	21,813	89,286	262,840	4,460	295	5,714	178,709	15,893
1978-79	170,308	21,964	87,527	279,799	3,487	271	3,604	213,873	17,729

Source: CT Department of Education

port, Hartford and New Haven, an 80 percent minority enrollment in any school would be in compliance with the language of the law, but not in keeping with the original intent.

The difficult issue of racial imbalance is still under consideration by the State Board of Education. The board is, as recommended by the advisory committee, considering, among other related concerns, "...the need to strengthen the law, to address specially impacted areas and support...financial incentive to local boards of education to promote integrated education for Connecticut's public schools."

Jobs for Connecticut Youth. In 1981, the State Department of Education initiated Jobs for Connecticut Youth to help economically and educationally disadvantaged youth acquire basic skills and overcome barriers to employment. Financial support for the program came from public and private sources, including a substantial two-year, start-up grant from the Edna McConnell Clark Foundation. The program features area teams which coordinate activities with the federal Job Training Partnership Act. In 1984-1985, the program served 1,571 young people, about half as many as the previous year; the decrease was due to reduced funding.

Finance

> "While it is easy, and to some extent appropriate... to question whether spending more tax money or using grant dollars will necessarily increase school excellence, the hard fact remains that some essential changes (improving teachers' salaries, working conditions, student ratios and teacher education) require money and that dealing with the special, vital needs of urban public schools will be expensive at a time when the resources of many cities are severely strained."
>
> *Contemporary Issues in Public Education*
>
> Report of a day-long conference sponsored by Aetna Life & Casualty Foundation, Inc., 1985.

Quality education—the learning opportunities to which all children are entitled and to which Connecticut's Board of Education is committed—costs money. Nationally, education from kindergarten through college is a $240 billion business, reports C. Emily Feistritzer, director, National Center for Education Information. The level of funding in Connecticut and the way in which available resources are allocated reflect both the state's commitment and its priorities. Adequate financial support for the public schools and the choice of programs and services to which the dollars are directed are critical factors in the achievement of equity and excellence.

Connecticut's 165 local and regional school districts are the primary providers of elementary and secondary school programs to approximately 468,000 public school students. The programs of the local and regional schools are supplemented by programs in six regional educational service centers, 17 state-operated vocational-technical schools, three special state school districts, the E. O. Smith high school and three quasi-public high schools. In addition, the State Department of Education provides research and support services to local school districts and to the State Board of Education.

Sources of Funds

Public elementary and secondary education in Connecticut is supported by a mix of federal, state and local revenues.

Since 1978-1979, the state share of all expenditures for public elementary and secondary education has increased steadily. During the same period, the federal share of educational expenditures has declined slightly. The local share of educational expenditures has also declined, but local governments continue to provide the majority of the funding for education.

The changes in the relative percentages of federal, state and local revenues devoted to public elementary and secondary education in Connecticut from 1979-1980 to 1984-1985 appear in the graph on page 38.

The shift in the balance of state and local funding is the result of legislation in the 1970s, following the *Horton vs Meskill* case, and of the State Board of Education's advocacy of state support of public education equal to the funding provided by local school districts.

In an April 1977 decision of *Horton vs Meskill* the Connecticut Supreme Court declared that it is the state's responsibility to provide "a substantially equal educational opportunity" for all public school students, regardless of town residence. Over-reliance on local property taxes, the court ruled, discriminates against pupils in lower-wealth towns, for whom the quality of education is "narrower and lower" than that available in communities able to spend more.

In January 1979 the State Board of Education adopted a ten-year goal to increase state aid to a level at least equal to local revenues for public elementary and secondary education. In the same year the Connecticut General Assembly, in response to the court decision, enacted legislation providing for education equalization aid to be distributed to the cities and towns in Connecticut through a guaranteed tax base (GTB) formula. However, during the 1984-1985 year, no interim steps for achieving the 50-50 goal were specified by either the legislature or the board.

Progress has been made, however, in moving toward the 50-50 funding goal. As the graph shows, the state share of expenditures for public elementary and secondary education in 1984-1985 was approximately 40 percent of total expenditures, up from 29.8 percent in 1978-1979. The local contribution has decreased accordingly, while other revenues have remained fairly constant.

General Fund Expenditures

In dollars, State General Fund expenditures for public elementary and secondary education (including some capital expenditures and teachers' retirement but excluding vocational rehabilitation and adult education costs) increased from $466.9 million in 1979-1980 to $837.4 million in 1984-1985, an increase of 79 percent. During this same period the consumer price index increased only 42.4 percent.

As a portion of the state General Fund budget, expenditures for public elementary and secondary education have risen since 1979-1980 from 19.6 percent to 21.4 percent. This increase can be attributed to a combination of rising expenditures for the education equalization grants to towns, additional funding for the teachers' retirement system, and increasing emphasis on the provision of equal educational opportunity for all students, as well as inflation.

Grants to Towns and School Districts

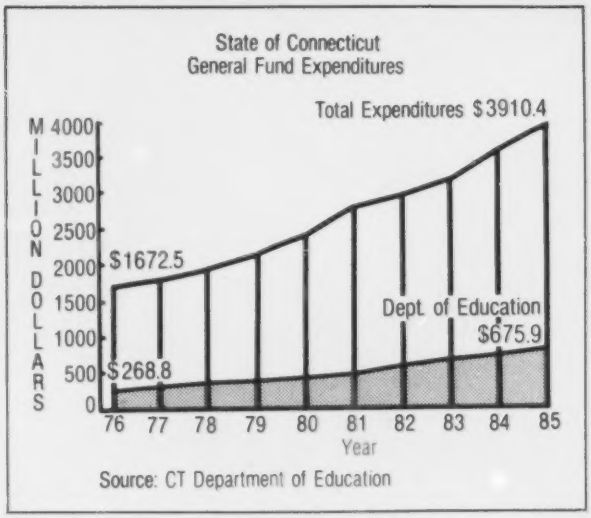
Nearly 92 percent of the department's budget is used for grants to support instructional programs and services. Six percent supports the state Vocational-Technical School System, operating 17 regional vocational-technical high schools and providing programs for nearly 20,000 students throughout Connecticut. Approximately two percent supports state services and management.

The department organizes its grants into two major categories: grants going directly to towns and school districts, and other grants or payments to organizations providing educational programs and services.

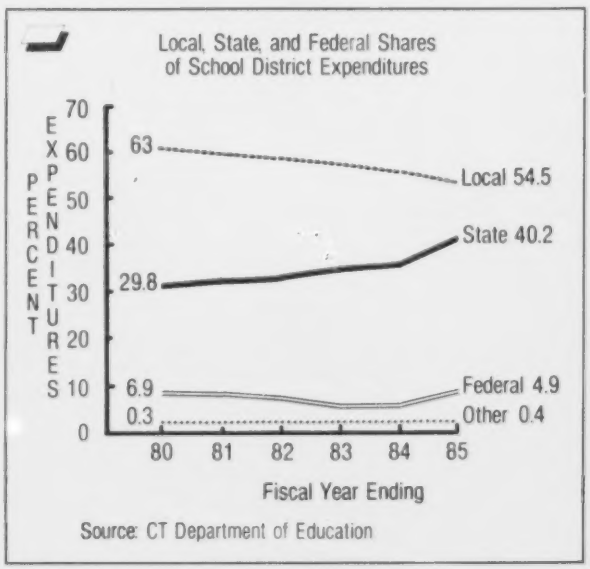
The largest grant to towns—and the largest program in the Department of Education budget—is the education equalization aid distributed through the guaranteed tax base (GTB) formula. The GTB grants are disbursed according to each town's property/income wealth, local effort to support education and educational need, using three-year-old data as the basis for computing each year's GTB grants.

Originally full funding of the GTB under the formula was scheduled for 1983-1984. While this would not have achieved the board's goal of 50-50 state and local financing for the public schools, it would have moved the state further toward that end. The Connecticut General Assembly, however, did not appropriate sufficient money to fund the GTB fully in that year or in 1984-1985.

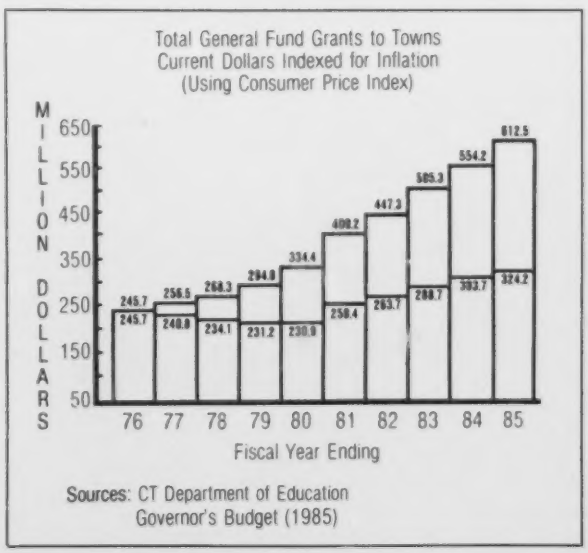
In 1984-1985 an estimated $421.4 million was disbursed to Connecticut towns under the GTB formula. In its budget request for 1985-1986, the State Board of



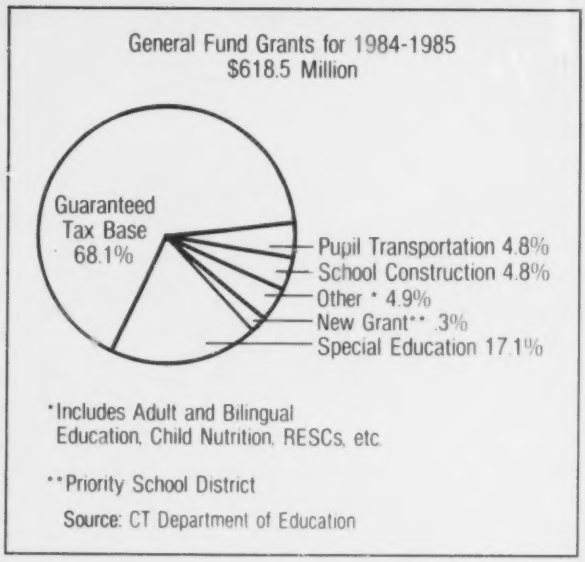
Source: CT Department of Education

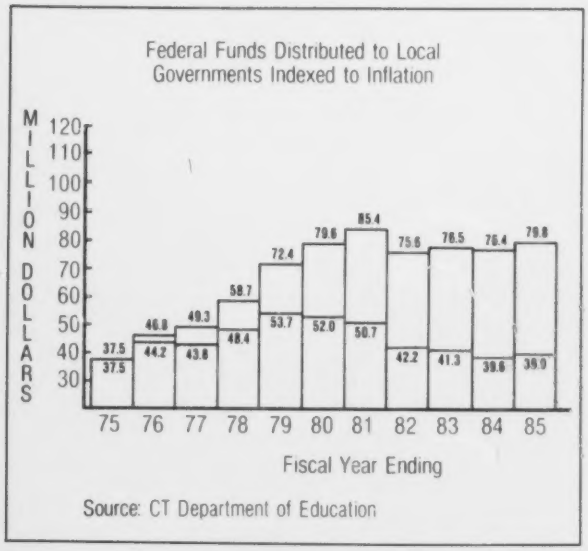


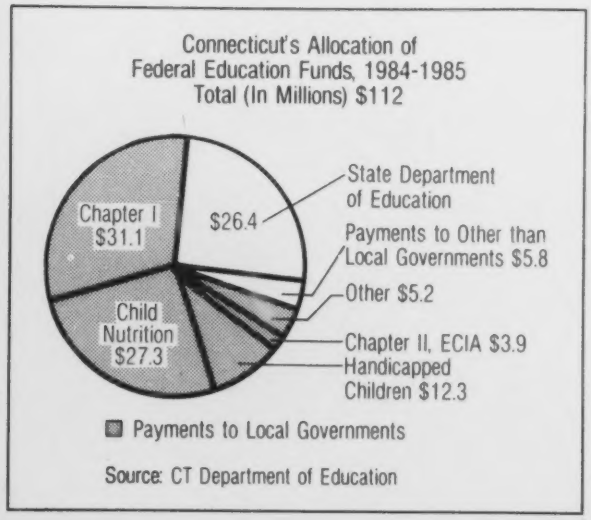
Source: CT Department of Education



Sources: CT Department of Education
Governor's Budget (1985)







Education for the first time proposed funding for equalization aid to towns that would meet its goal of 50-50 state and local sharing. In its request for fiscal year 1986-1987, prepared in the spring of 1985, the State Board continued to push for 50-50 funding, to be achieved within four years, and requested $532 million in equalization aid for 1986-1987.

Other major state grant programs, now funded on an equalizing basis but distributed to school districts rather than to towns, include transportation, school construction, adult and special education. Under these grant formulas, low-income wealth districts receive more aid than wealthy districts; over 95 percent of all state grants for education are equalized in this way. These grants to school districts, combined with the GTB grants to towns, account for $587.7 million in 1984-1985. Even when indexed for inflation, the level of funding for all grants has been increasing steadily since 1980.

Several recent developments, including the board's decision to seek additional funding to meet the long-range goal of 50 percent state and 50 percent local funding (exclusive of federal dollars) within four years, may affect the GTB formula and future appropriations under it. In 1984 both the Board's Education Equity Study Committee and the Education Committee of the General Assembly endorsed the 50-50 plan, although the General Assembly did not provide the necessary funding.

In addition to increased funding for many of the existing grant programs, the Department of Education in 1984-1985 introduced a new program of Priority School District grants. The program was funded at $2.0 million. These three-year grants assist school districts having the greatest academic need to improve student achievement and educational opportunities. The program will be expanded in 1985-1986 from ten to 15 districts for which $2.5 million has been appropriated.

Payments to Other Organizations Providing Educational Services

Although most state grant money is distributed to towns and school districts, some $6.04 million (approximately one percent of the department's budget) is disbursed directly to the six regional educational service centers (RESCs) and to other organizations providing programs and services. Some of the programs funded in this manner are vocational rehabilitation and instructional television programs broadcast to the schools.

Funding for the American School for the Deaf is also included in the State Department of Education's budget as a pass-through item.

Disparities Continue

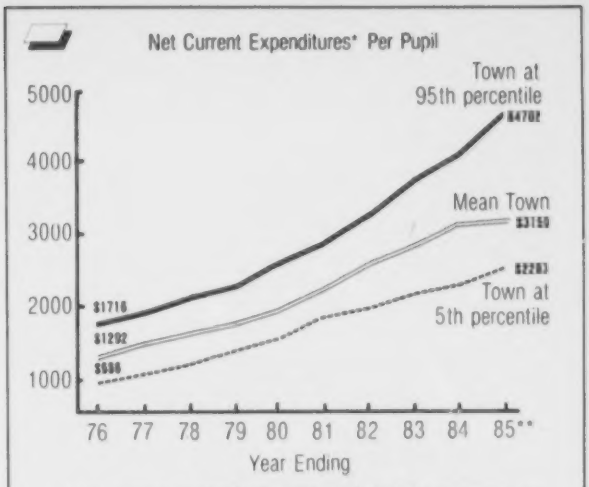
Despite the equalizing intent of the GTB formula and other state grant programs, substantial disparities in educational expenditures continue to exist among

Connecticut towns, as noted by the State Supreme Court in 1984, and equality of educational opportunity for all public school students still remains a central, but elusive, goal.

One purpose of the GTB grant formula, in addition to equalizing town expenditures for education, is to reduce fiscal hardship for towns with burdensome school tax rates. Tax disparities have lessened, in part because wealthier towns have used equalization aid for tax relief. Since 1979-1980, the ratio of school tax rates between the 5th and 95th percentile towns has been reduced by more than 20 percent, with the reduction in school tax rates taking the form of tax relief in high tax-effort towns (see table, page 40).

The graph on page 40 illustrates the sizable range in per pupil expenditures that exists even after the equalization impact of state grants. Although per pupil expenditures have increased significantly since 1975-1976, the disparity in expenditures between high-spending and low-spending towns has not decreased substantially. The highest spending town continues to spend more than twice as much per pupil as the lowest-spending town, just as it did in 1975-1976. In that year the town at the 95th percentile—the 9th highest-spending town—spent 78 percent more than the 9th lowest-spending town at the 5th percentile for a ratio of 1.78:1. In 1984-1985, the ratio of the 95th percentile to the 5th percentile town in per pupil expenditures was 1.76:1.

Studies have shown that 40 percent of the existing disparity in learning opportunities can be attributed directly to the differences in teacher salaries. An additional 20 percent can be traced to the different teacher-pupil staff ratios in the school districts. The disparity in educational opportunity, as measured by these indica-



*Net current expenditures per pupil include expenses per pupil for daily operation of the school program but do not include transportation, capital outlay, debt service expenses and tuition received from nonresident pupils

**Preliminary Data

Source: CT Department of Education

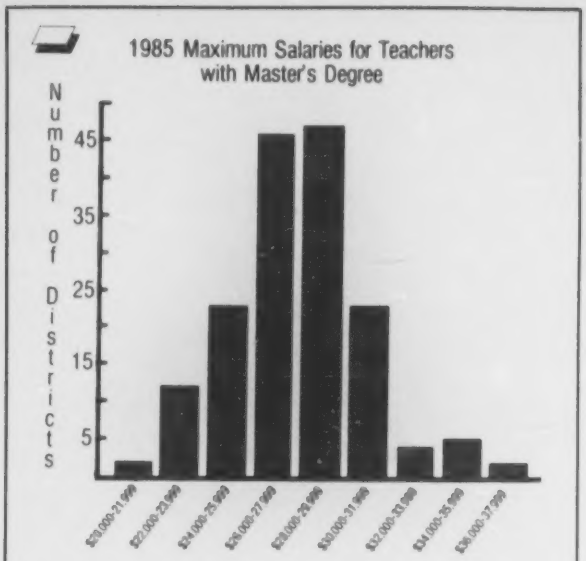
School Tax Rate[1]
(in mills)
1979-80 - 1983-84

Range in School Tax Rates	1979-80	1980-81	1981-82	1982-83	1983-84[2]	% Change 1980-84
High Town	52.49	46.62	43.75	40.15	46.68	-11.07
95th percentile	39.49	34.03	33.18	33.19	33.00	-16.43
Mean Town	25.54	23.55	23.29	23.14	23.32	-8.69
5th percentile	10.74	10.91	10.33	9.71	11.22	4.47
Low Town	6.08	5.98	5.75	5.59	5.92	-2.63
Disparity Measures						
95:5 Ratio[3]	3.68	3.12	3.21	3.42	2.94	-20.11
High:Low Ratio[4]	8.63	7.80	7.61	7.18	7.89	-8.57

[1] School tax rate equals local tax dollars for education divided by town's Equalized Net Grand List adjusted for relative per capita income shown as a mill rate
[2] 1983-84 data pending completion of audit adjustments
[3] 95:5 Ratio 95th percentile town divided by 5th percentile town
[4] High to Low Ratio High town divided by low town

Although there has been a substantial decline in school tax rates since 1979-80, the disparities have changed very little. The mill rate for towns with lowest school taxes, at the 5th percentile and below, is close to what it was in 1979-80. The disparity between high and low tax rate towns has narrowed only slightly, and the school tax rate in the town with the highest mill rate, after a four-year decline, rose almost nine percent in 1983-84.

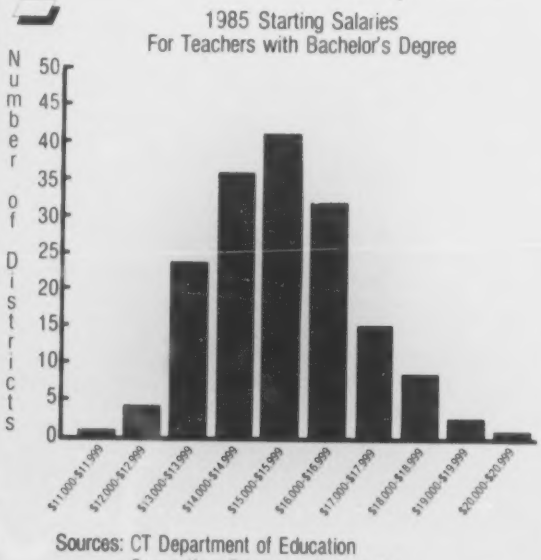
Source: CT Department of Education



Source: CT Department of Education

The overall range for teachers with a master's degree who are being paid at the maximum is even greater than for beginning teachers. Maximum salaries range from $20,000 to $37,062, a variation of almost 65 percent. Only two districts, however, pay below $22,000 and 11 pay $32,000 or more. To reach the maximum on the master's schedule takes from 8 to 23 years with an average of 13 years.

As an example of the wide discrepancy in what districts pay teachers, the starting salary in Fairfield is greater than the maximum master's degree salary in Union.



Sources: CT Department of Education
Connecticut Education Association

Starting salaries paid to teachers in Connecticut range from $11,497 to $20,322, a difference of almost 77 percent. However, the majority of districts—148—pay beginning teachers in the narrower range of $13,000 to $18,000.

Teacher/Student Ratios*
1984-85

	Teachers Per 1,000 Students	Students Per Teacher
High	113.73	8.79
95th percentile	80.44	12.43
Mean	67.72	14.77
5th percentile	57.85	17.29
Low	52.07	19.20

High: Low Ratio	2.18	Low: High Ratio	2.18
95:5	1.39	5:95	1.39
95: Mean	1.19	Mean: 95	1.19

* Including all school districts in Connecticut but excluding special education teachers, support staff and administrators

One measure of equity in learning opportunities appears in the student/teacher ratios which are indicative of class size. The range among all districts in Connecticut is from approximately nine students per teacher to 19, with the mean district at approximately 15 students per teacher.

The table is based on the assumption that, in general, smaller class sizes provide the best learning environment. The lowest student/teacher ratios are at the 95th percentile and above, while the largest number of students per teacher are in districts at the 5th percentile and below. The average for all districts is 14.77 students per teacher.

Source: CT Department of Education

tors, and shown in the accompanying tables, reflects variations in town-by-town expenditures. There is still a wide range in staff ratios per thousand students. The 8th highest staffed district at the 95th percentile of Connecticut's 165 school districts has a 39 percent higher teacher/student ratio than the 157th district at the fifth percentile of staff ratios.

Teacher salaries, to a large extent, also depend on the size and wealth of a school district and state policy makers recognize that teacher salary ranges account for a significant portion of the expenditure disparities. This factor, coupled with the realization that salaries for entry-level and experienced teachers are significantly below salaries for comparable positions in the private sector, led the Governor to establish a commission to study teacher salaries.

The Governor's Commission released its recommendations in June 1985, advocating a minimum starting salary for teachers of $18,500 in 1984 dollars. Governor O'Neill gave his support to the concept and, in the fall of 1985, the Educational Equity Study Committee developed specific grant recommendations which the State Board of Education endorsed.

The Governor's Commission on Equity and Excellence in Education also endorsed the development of a Teacher Salary Incentive Grant program to encourage significant increases in salaries. Such a grant would give additional state aid to school districts that raise their teacher salaries.

Dollars to Follow Priorities

The board continues to seek adequate funding for public education and to allocate the available resources to those programs that will achieve its goals and objectives. The department's budget reflects the board's priorities and attempts to respond to the needs of elementary and secondary education as shown by the indicators of success.

Some examples of programs to which the board has assigned a high priority and for which the board will seek increased funding are:

- the Priority School District program, initiated in 1984-1985;
- The Institute for Teaching and Learning to provide summer workshops and school-year conferences for teachers and administrators;
- mastery testing for 4th, 6th and 8th grade students, and funding for remedial programs for students who need help to achieve mastery;
- early childhood education, and
- adult basic education.

The fifth and final section of this annual report on the condition of elementary and secondary education in Connecticut, which follows, discusses the State Board of Education's plans for the future, including highlights of the legislation it will seek in 1985-1986 on behalf of quality education for all the state's residents.

Meeting the Challenge

In the preceding sections of this annual report on the condition of education in Connecticut, the staff of the Department of Education—using information supplied by the local school districts—has tried to represent an accurate picture of elementary and secondary education during a given period of time, 1984-1985. But education is a dynamic and constantly changing enterprise in which each day's activities modify yesterday's facts and trends. A look at 1985 is a look at the challenges to be met in the future. It provides the clues to the actions that will be necessary to achieve the goals and objectives of the Board of Education and the initiatives of the commissioner to improve the quality of instruction for Connecticut's students during the coming years.

Equity and excellence—equal opportunity for every student to receive a quality education—are the motives underlying all of the board's policies, the commissioner's initiatives and the department's activities. These efforts will continue until the disparities in the quality of learning experiences and in the availability to all citizens of comparable educational programs are diminished.

Efforts will continue to raise standards and expectations for both teachers and students. Activities in progress and proposals under consideration place heavy emphasis on teachers—their preparation and competence, their recruitment and professional development, their credentials and their salaries, and on improving teacher-pupil staff ratios. Earlier and better childhood education, to give each child an early start, and mastery testing in 4th, 6th and 8th grades, to monitor learning progress during the early years, are intended to ensure that every student will have the foundation to perform adequately through the elementary grades and to achieve at the level required to complete high school.

The State Board of Education and the State Department of Education staff, having reviewed the data indicating the condition of education in Connecticut in 1984-1985, will continue to be proactive in pursuit of greater equity and excellence in the public schools. The directions to be taken on some of the paramount issues are summarized below.

Improving Student Achievement

The desire to provide equity and excellence for all students, irrespective of the student's social or economic background, underscores all the activities of the board and the department. For example: many priority activities of the department are aimed directly at improving and equalizing student performance. The State Board of Education has spent a great deal of time trying to formulate a definition of what constitutes an equal educational opportunity and expects to release its definition in 1986.

- **Early childhood education.** The board continues to advocate provision by the public schools of learning opportunities for children during the early formative years. One way, favored by the board and the commissioner, is to offer extended-day kindergarten programs on a voluntary basis for children whose parents want to enroll them.

  Funds have been requested to promote the extended-day kindergarten and pilot projects to serve as models of preschool programs for four-year olds. A similar request would provide funds, on a competitive basis, to public and private agencies to establish programs and services for families with infants and toddlers who are severely handicapped or most at risk of developing such handicaps. The board's position is that all youngsters should be eligible for head-start programs and should have them available.

- **Mastery testing.** Testing of grades 6 and 8 will be instituted in 1986. This will round out the full program of mastery testing begun in 1985 with the 4th grade tests in mathematics and language arts. Test results for students as they progress through the different grade levels will be available to school districts, allowing teachers to look at longitudinal data and determine how well students are mastering the essential concepts and the ability to communicate.

- **Common core of learning.** Another activity in the continued promotion of higher standards and expectations for all students is the development of a common core of learning, i.e., a list of outcomes or achievements to be expected of all high school graduates. These outcomes would become the standard against which an educated citizen would be assessed.

Teacher Salaries And Qualifications

These two issues are inseparable. Teacher salaries must be improved concurrently with the implementation of higher standards for teacher preparation and certification reform. Both the board and the legislature recognized the interdependence of standards and salaries last year and agreed to defer action on the proposed certification sequence pending the report of the Governor's Commission on Equity and Excellence in Education. The commission's recommendations became available in June 1985, so that proposals for improving both salaries and standards for teachers could be considered by the General Assembly in its 1986 session.

- **Certification reform.** The certification sequence proposed by the State Board of Education and described in detail in the 1984 annual report, *Meeting the Challenge*, would provide a systematic process of evaluation and professional development. In the proposed three-tier system, teachers would receive an initial certificate, valid for one year while the teacher completes a beginning teacher program and renewable only once for an additional year. Beginning teachers would be assisted by a mentor teacher and their competencies would be evaluated three times during the initial year by an assessment team. Beginning in 1987 they must also successfully complete a subject matter examination. At the successful completion of the first step, the teacher would receive a provisional certificate, valid for eight years and not renewable. During the provisional period, the teacher must teach successfully for three years and complete 30 semester hours of credit. The professional certificate, granted after successful completion of the provisional period, would be valid indefinitely, contingent upon completion of nine continuing education units (90 contact hours) every five years. An alternative route to initial certification, which can eventually lead to provisional certification, would be available at the request of local school districts for nursery school through grade 6, for grades 5 through 8, and in secondary subject area endorsements for grades 7 through 12. Candidates must meet certain requirements, including passing the CONNCEPT test and completing an eight-week course in teaching methods.

- **Salary adjustment.** The State Board of Education proposed, for legislative consideration, and continues to support a three-part plan for reducing teacher salary disparities throughout the state. The plan calls for setting a minimum starting salary of $19,300; an increase in salaries of current staff to make them comparable to salaries offered by other major employers; and the establishment of a minimum teacher-pupil staff ratio. The board advocates state funding of the difference between the local contracted salary and the mandated minimum for three years after the minimum's adoption. State funds would also be available to assist districts that choose to participate in enhancing the salaries of current staff and to employ teachers to reach a ratio of 64.5 teachers per 1000 students.

Teacher Preparation

To avoid a possible teacher shortage ways must be found to recruit the best and brightest students into the profession, to retain the best and to insure that they continually update their professional capabilities. Some of the ways in which the board proposes to do this are the following:

- **Recruitment of prospective teachers.** A brochure will inform high school students about teacher training programs, institutions offering such programs, incentive and testing programs (ELEET and CONNCEPT), as well as salary, benefits, working conditions and the rewards of a teaching career. Follow-up activities will be arranged through guidance counselors and classroom teachers.

- **Prospective teacher preparation.** The State Department of Education, which must approve the teacher preparation programs within the state, will continue to work for implementation of the standards and procedures adopted in 1984. They represent a significant revision of the sequence of academic and practical experiences provided by colleges and universities and designed to lead to teacher certification. The new standards describe measurable objectives and provide for the evaluation of program effectiveness. Student progress will be measured by a clinical assessment approach. Other changes under consideration are lengthening the student-teaching period; increasing the emphasis on liberal arts; requiring a major in an academic subject; requiring special education training for all prospective teachers, and extending the teacher preparation program beyond the traditional four-year program.

- **Teacher-In-Residence Program.** State funding of this program, advocated by the board, would enable as many as 50 classroom teachers to spend two years at an institution of higher education, sharing their firsthand experiences and insights with prospective teachers.

- **Cooperating teacher-student teacher program.** Experienced classroom teachers, carefully selected by school district personnel, will provide daily supervision of practicing student teachers. Cooperating teachers would be responsible for no more than two student teachers per year and would be compensated by the state for the additional assignment.

- **Extending the length of the school year for teachers.** The State Board of Education will continue to promote a longer school year for teachers. This increase to 190 days by 1990-1991 would be phased in, in two- and three-day increments over four years, starting in 1987-1988. The longer school year would provide teachers with more time for in-depth professional development programs without a loss of student instructional time. Teachers would earn continuing education units during this time by participating in local training programs.

Professional Development

Continuing professional and career development is an integral part of the proposed certification process. Each school district is presently required to have a five-year plan for staff development. Experiences may include workshops, institutes, seminars, college or university courses, conferences, travel, individual supervised activities, curriculum development projects and mentor programs. The range of programs allows teachers to fulfill continuing education requirements at no cost.

- **The Institute for Teaching and Learning.** The department proposes to continue expanding The Institute programs, both the summer sessions for teachers and principals, and follow-up workshops and conferences during the school year. Funds are being sought to allow 5,000 certified staff, approximately one-seventh of the state's teachers and administrators, to attend The Institute programs each year.

Other Ongoing Initiatives

The needs for remediation, for education of adults and of the gifted and talented are continuing concerns, as the board seeks ways to carry out the mandate for equal educational opportunity for all students. Requests for increased funding for these purposes reflect the board's position.

- **Adult education.** The state is seeing the emergence of the needs of adults as one of the main issues in education. The trend over the past five or six years has been for local districts to provide progressively more support for adult education programs. This is part of a growing commitment in Connecticut to attack adult illiteracy in the state, a commitment which the State Board of Education shares.

- **Gifted and talented.** The board favors the establishment of a mandatory gifted and talented program for all identified students from kindergarten to 12th grade. The proposed program would be designed by 1989 and phased in by 1994.

- **Compensatory education.** The board will continue to recommend increased funding for compensatory education for students in need of remediation.

Looking Ahead

In a number of ways, this is a transition report. Many of the activities reported were generated by the agenda for improving the quality of education in Connecticut proposed by the commissioner in *Connecticut's Challenge* and adopted by the State Board of Education in January 1984. At that time, the board made a commitment to take the lead in setting standards and supporting their attainment.

Progress toward this goal during 1984-1985 is documented in this year's annual report, *Meeting the Challenge*. During the year, the board adopted a new five-year comprehensive plan for 1985-1990, entitled *Design for Excellence*. The plan is a blueprint for the future. It combines the goals and objectives for elementary, secondary, vocational, career and adult education into a single master plan and clearly identifies the indicators of success that will be used to measure progress each year. The department has started to implement the action plans to achieve the goals and objectives, and next year's annual report on the condition of education, 1985-1986, will measure progress against the established indicators of success.

The State Board of Education believes that follow-through on the initiatives and actions proposed will carry Connecticut public schools a long way towards the goals of educational equity and excellence. ■■■